

Dear Jim,

3.29/95

Thanks for those records that include the Frazier sketch. They appear to be a different set of sketches of the limo but they hold the content Randy wanted. My guess is that what you sent is the sketches he made at the scene, witness his using a ruled pad. My recollection is that the set I seem to have mislaid was neater, on unruled paper and different in other ways that may not include content. Although this set says the view of the windshield is from the outside. I do not remember that from the other set.

I do not recall any earlier notations of "no value" relating to the fragment specimens. It was not true when Frazier wrote it. At the very least they were of, and he knew they were of great value in spectrographic and ~~the~~ neutron activation analyses.

<sup>There</sup> are also some glaring omissions relating to the bag and the blanket. For example, there is no reference to the absence of any oil or smudges that could have been from oil. In fact neither had the slightest trace of any oil - from the "well-oiled" rifle.

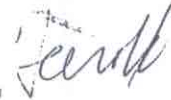
My recollection and of course it could be incorrect, is that the other set of sketches reflect the deposits of debris from the head on the hood. I think that might be of interest to Randy.

If there is someone there you can ask, I think the other set is worth trying to get for Randy. If you do, I'll appreciate a copy, thanks.

although these sheets say HSCA on the side, the cover sheet says SSCIA, Church.

As of today's mail no word from Cyril or Chip.

Thanks and best,



I think the space between the jump seats in this set is greatly exaggerated. The reason might be innocent but is there any reason to assume it is? I think not. Hoover had already ordained the lone assassin.

Date:03/20/94  
Page:1

JFK ASSASSINATION SYSTEM

IDENTIFICATION FORM

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AGENCY INFORMATION

AGENCY : SSCIA  
RECORD NUMBER : 157-10011-10108

RECORDS SERIES :  
REPORT

AGENCY FILE NUMBER :

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DOCUMENT INFORMATION

ORIGINATOR : FBI  
FROM :  
TO :

TITLE :  
ANALYSIS OF FIREARMS; VEHICLE, ETC.

DATE : 11/23/63  
PAGES : 26

SUBJECTS :  
COPIES OF PHOTOS; REPORT ON FIREARMS, SPECTROGRAPHIC  
MICROSCOPIC ANALYSES; FINGERPRINTS

DOCUMENT TYPE : PAPER, TEXTUAL DOCUMENT  
CLASSIFICATION : U  
RESTRICTIONS : OPEN IN FULL  
CURRENT STATUS : 0  
DATE OF LAST REVIEW : 03/24/94

OPENING CRITERIA :

COMMENTS :  
SSCI Box 337, Folder 12 (VI-C-5-D2)

SSCI Box 337, Folder 12

K 1984

Record Number 157-10011-10108

VIC-5-D2

4/5/77

EG

SENATE SELECT COMMITTEE REQUEST  
November 21, 1975

November 6, 1975  
Item #4

OR DELIVERY

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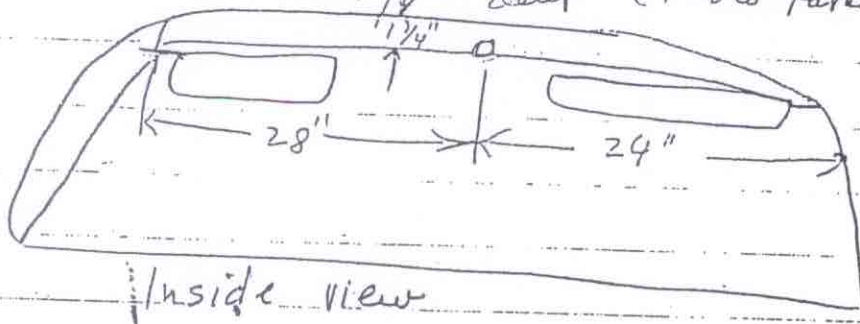
REVIEWED BY FBI/JFK TASK FORCE

ON 11/4/93 Dal

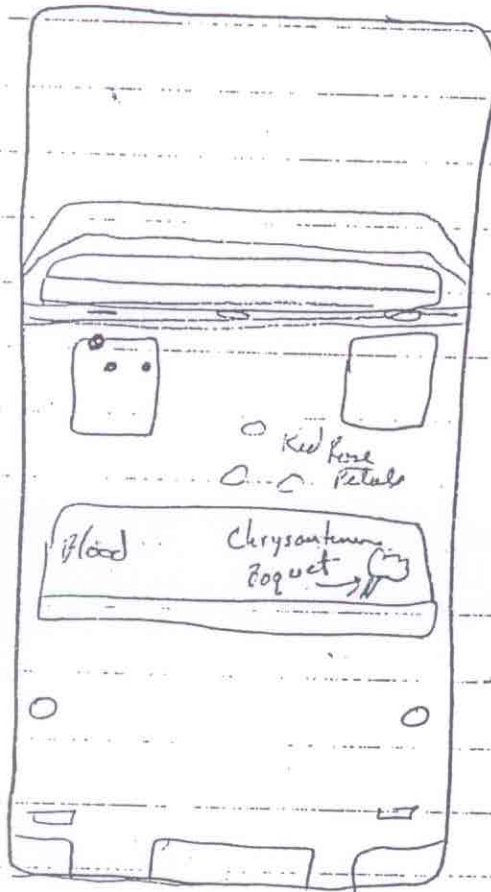
- RELEASE IN FULL
- RELEASE IN PART
- TOTAL DENIAL

1.8

PC - Secret Serv. Gov. Lincoln Presid. limousine 1130 AM 11/27/71  
 chrome strip) dent (Photo taken) No direction indicated



Inside view



Blood, tissue or bone  
 Frag. scattered over interior  
 of car and on hood - on visors  
 (both sides of rt visor)

3 Frag. Lead found on rear  
 floorboard, 2 on rug, 1 in  
 seat hinge channel (Jump Se)

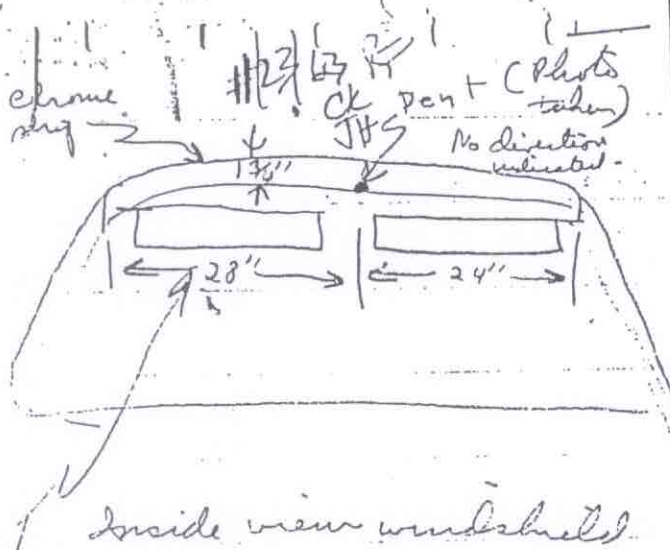
No other frags. found in car  
 No bullet holes found

ROM

This document is to be used in response to a request for information dated 1915

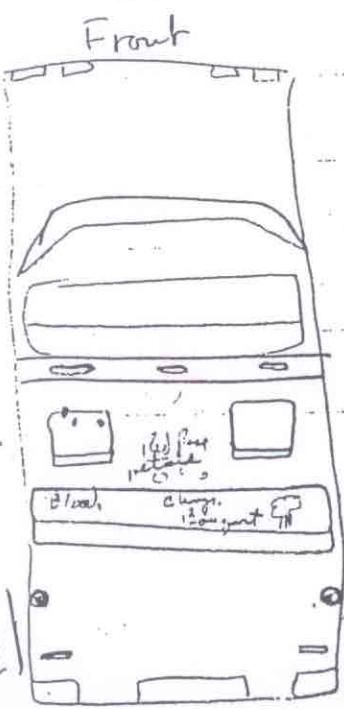
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Reference copy, 11/23



Inside view windshield

in visors



Front

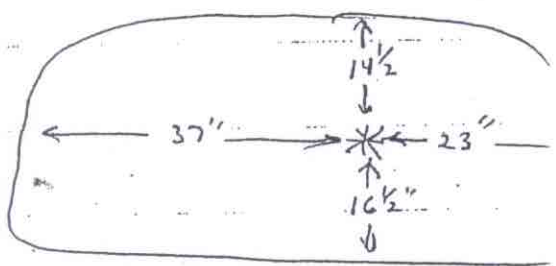
Blood, hair or  
Krone frag. scattered  
over exterior of car  
& on hood - on  
visors (both sides of  
Rt visor

3 Frog Lead found  
on Rear floorboard.  
2 on Rug, 1 in  
seat hinge channel  
(Jump seat.

No other Frogs  
found in car,

No bullet holes found  
except front

11/23  
1:30 am  
Evan car -

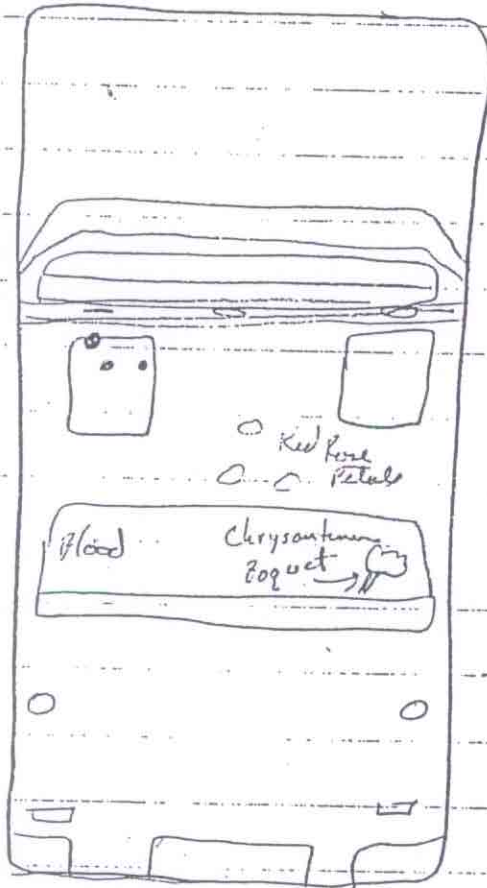
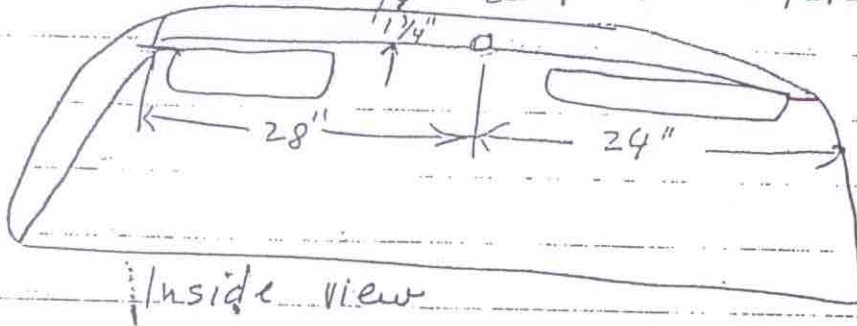


outside view

11/23

D U J

PC- Secret Serv. Gov. Lincoln Presed. business 1130 AM 11/23/63  
chrome strip) seat (Photo taken) No direction indicated



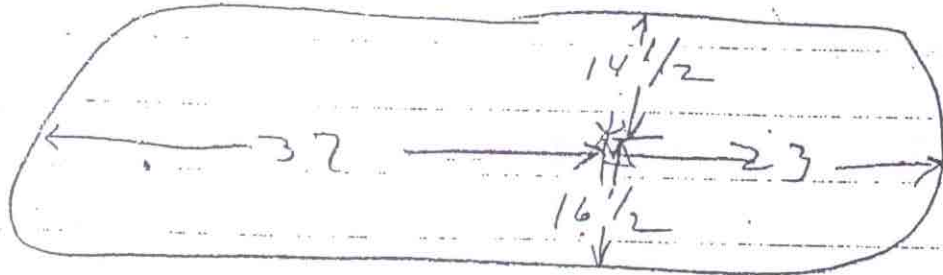
Blood, tissue or bone  
Frag. scattered over interior  
of car and on hood-on visors  
(both sides of vt visor)

3 Frag. Lead found on rear  
floorboard, 2 on rug, 1 in  
seat hinge channel (Jump Se)

No other frags. found in car  
No bullet holes found

RDM

Lucas business 11/23/63 PC28243  
R



- 1 Swear resembling lead on inside
  - 2 Cracks on outside - stellate (radiating)
  - 3 Minute frag missing from outside
- Struck by projectile on inside surface

Reference copy, JFK Collection: HSCA (RG 233)

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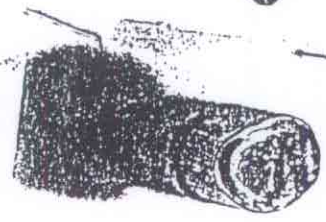
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Killine  
Froyer  
Cunningham  
243



D 436461 AX

11/22/63  
11/23/63

Q1  
Bullet from stretcher

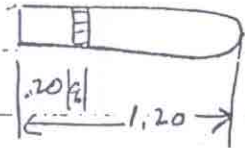
Wt - 158.6 grains

Type <sup>MC</sup> 6.5mm Mammichy-Carcano (Italian) Solid Pt

# L & G - 4 Rt

Land - .07

Groove - .13



07  
13  
20  
24  
80 vs 796  
4R

Mfg: ~ to W.C.C. gr

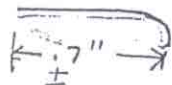
2  
Bullet fragment from seat near driver

Wt 44.6 grains

No cannelure

Type None portion of MC-C with lead Full metal jacket type

Land 07 ± 6.5mm  
Gr 13 ± 2 lead  
24 x 4 = 80 = 6.5



21.0  
65.6 gr

3  
Bullet from beside front seat

Wt = 21.0 gr

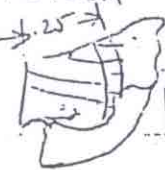
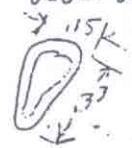
Q2 & Q3 should be from one or two bullets

Type = MC Jacket - base only no lead - full metal jacket type

# L & G - 4 Rt

Land .07

Groove 13 24 x 4 = 80 vs 796 or chest for 6.5mm



REC-77 FRO

DEC 1 1915

94 95 Lead frag from lead - 1.65 grains

11/23 Bethesda No lab Spectrochem

95 95 " " " " @ 15 gr

" " " " of some - see GH

(#1 from flooring left side jump seat @ 9 gr)

Q14) No Value

" " " " @ 7 gr

89 Lead frag - 5 grs - Gov. arm. Q9

No Value

14



*Lab. report*  
To C.O. - Dallas Nov 23, 1963

RECORDED  
11/26/63 KO

FEDERAL BUREAU OF INVESTIGATION  
UNITED STATES DEPARTMENT OF JUSTICE

Laboratory Work Sheet

Re **ASSASSINATION OF PRESIDENT  
JOHN F. KENNEDY**

File #  
Lab. # **PC-78243 BX J**

**Mr. Jesse E. Curry  
Chief of Police  
Dallas, Texas**

Examination requested by:

Examination requested: **Firearms - Spectro. -  
Microscopic - Fingerprint**

Date received:

Result of Examination:

Examination by: **FRAZIER  
STOMBAUG  
GALLAGHER**

- 2 - Chief, U. S. Secret Service**
- 2 - FBI, Dallas**
- 1 - FBI, Washington Field**
- 1 - FBI, Richmond**
- 1 - FBI, Baltimore**
- 1 - FBI, Chicago**

Specimens submitted for examination

Evidence received from Special Agent Elmer L. Todd, Washington Field Office of the FBI on 11/22/63:

**Q1 Bullet from stretcher**

Evidence received from Special Agent Orin Bartlett of the FBI on 11/22/63:

- Q2 Bullet fragment from front seat cushion**
- Q3 Bullet fragment from beside front seat**

Evidence received from Special Agent James W. Sibert and Special Agent Francis O'Neill, Jr., of the Baltimore Office of the FBI on 11/23/63:

- Q4 Metal fragment from President's head**
- Q5 Metal fragment from the President's head**

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DEC 1 1975

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Reference copy, JFK Collection: HSCA (RG 233)

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Evidence received from Special Agent Vincent E. Drain of the Dallas Office of the FBI on 11/23/63:

- Q6 6.5 mm Mannlicher-Carcano cartridge case from building
- Q7 6.5 mm Mannlicher-Carcano cartridge case from building
- Q8 6.5 mm Mannlicher-Carcano cartridge from rifle
- Q9 Metal fragment from arm of Governor John Connolly
- Q10 Wrapping paper in shape of a large bag
- Q11 Suspect's shirt
- Q12 Blanket
- Q13 Bullet from Officer Tippett

- K1 6.5 mm Mannlicher-Carcano rifle, with telescope sight, Serial No. C2766
- K2 Paper and tape sample from shipping department, Texas Public School Book Depository
- K3 .38 Special Smith and Wesson revolver, Serial No. V510210, Assembly No. 65248

Evidence obtained by FBI Laboratory personnel during examination of the President's limousine:

- Q14 Three metal fragments recovered from rear floor board carpet
- Q15 Scraping from inside surface of windshield

Also Submitted: Photograph of rifle, K1  
Finger and palm prints of Lee Harvey Oswald

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401

Carbon

Fe	Pb	Sb	Mg	Sn	Pb	Cu	Ag	Fe
1		<.08 >.009	Mg <sup>tr</sup>	0 <.008	≤.05	Cu .004	<.005	Fe <sup>tr</sup> <.01
2		<.08 >.009	Mg <sup>tr</sup>	0 <.008	≤.05	Cu .004	<.005	Fe <sup>tr</sup> <.01
3		<.08 >.009	Mg <sup>tr</sup>	0 <.008	≤.05	Cu .004	<.005	Fe <sup>tr</sup> <.01
4		<.08 >.009	Mg <sup>tr</sup>	0 <.008	≤.05	Cu .004	<.005	Fe <sup>tr</sup> <.01
5	.0035	.009		-	.05	.041		
6	.007	.009		.008		.0015		
7	.007	.009		.008	.032	.0018		
	AS	Sb		Sn	Pb	Cu	Ag	

- (1) larger piece from Q14-Q15
- (2) largest piece Q14
- (3) From head Q9
- (4) head from Q2
- (5) Std. A101
- (6) Std A104
- (7) Std A104

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10 sec Per Gun Low Air.  
1min 20 sec H Air. Exposure  
PC-78243  
⊗

72 C. Control

69 Fe Arc

66 - 1 From larger piece of Q4 + Q5 lead Head of JFK

63 - 2 From larger piece of Q4 + Q5 lead Head of JFK

60 - 3 From largest piece Q14 (rug in front of jump seat)

57 - 4 From largest piece Q14 (rug in front of jump seat)

54 - 5 From lead in Q9 (right arm of Gov.)

51 - 6 From lead in Q9 (right arm of Gov.)

48 - 7 lead from car Q2

45 - 8 Lead from car Q2

42 - 9 Scrapings from inside windshield Q15

Pb Pz Cu

PC-78243

Nov 23 1963

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NOV 23 1963

REPORT of the



FEDERAL BUREAU OF INVESTIGATION WASHINGTON, D. C.

To: Mr. Jesse E. Curry Chief of Police Dallas, Texas

November 23, 1963

This examination has been made with the understanding that the evidence is connected with an official investigation of a criminal matter and that the Laboratory report will be used for official purposes only, related to the investigation or a subsequent prosecution. Authorization cannot be granted for the use of the Laboratory report in connection with a civil proceeding.

Re: ASSASSINATION OF PRESIDENT JOHN F. KENNEDY

John Edgar Hoover, Director

YOUR NO. FBI FILE NO. LAB. NO. PC-78243 BX D-436461 AX

Examination requested by: Addressee Reference: See below Examination requested: Firearms - Spectrographic - Microscopic Analyses - Fingerprint - Document Specimens:

Evidence received from Special Agent Elmer L. Todd, Washington Field Office of the FBI on 11/22/63:

Q1 Bullet from stretcher

Evidence received from Special Agent Orin Bartlett of the FBI on 11/22/63:

Q2 Bullet fragment from front seat cushion

Q3 Bullet fragment from beside front seat

- Tolson Belmont Mohr Casper Callahan Conrad DeLoach Evans Gale Rosen Sullivan Tavel Trotter Tele. Room Gandy

2-Chief, U.S. Secret Service 2-FBI, Dallas 1-FBI, Washington Field 1-FBI, Richmond 1-FBI, Baltimore 1-FBI, Chicago

Page 1 MAIL ROOM TELETYPE UNIT

62-107660-1694 DEC 3 1963

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(continued on next page)

Reference copy, JFK Collection: HSWA (NO 433)

Reference copy, JFK Collection: HSCA (RG 233)

Evidence received from Special Agent James W. Sibert and Special Agent Francis O'Neill, Jr., of the Baltimore Office of the FBI on 11/23/63:

- Q4 Metal fragment from the President's head
- Q5 Metal fragment from the President's head

Evidence received from Special Agent Vincent E. Drain of the Dallas Office of the FBI on 11/23/63:

- Q6-6.5 millimeter Mannlicher-Carcano cartridge case from building
- Q7 6.5 millimeter Mannlicher-Carcano cartridge case from building
- Q8 6.5 millimeter Mannlicher-Carcano cartridge from rifle
- Q9 Metal fragment from arm of Governor John Connolly
- Q10 Wrapping paper in shape of a large bag
- Q11 Suspect's shirt
- Q12 Blanket
- Q13 Bullet from Officer Tippett

- K1 6.5 millimeter Mannlicher-Carcano rifle, with telescope sight, Serial No. C2766
- K2 Paper and tape sample from shipping department, Texas Public School Book Depository
- K3 .38 Special Smith and Wesson revolver, Serial No. V510210, Assembly No. 65248

Evidence obtained by FBI Laboratory personnel during examination of the President's limousine:

- Q14 Three metal fragments recovered from rear floor board carpet
- Q15 Scraping from inside surface of windshield

Also Submitted: Photograph of rifle, K1  
Finger and palm prints of Lee Harvey Oswald

Results of examinations:

The bullet, Q1, is a 6.5 millimeter Mannlicher-Carcano rifle bullet. Specimen Q1 weighs 158.6 grains. It consists of a copper alloy jacket with a lead core.

PC-78243 BX

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(continued on next page)

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NOV 27 1963

Specimen Q2 is a portion of the core of a rifle bullet. Specimen Q2 weighs 44.6 grains and is composed of a portion of the copper alloy jacket and a portion of the lead core. Specimen Q3 is a portion of the base section of a copper alloy rifle bullet. Q3 weighs 21.0 grains and is composed of a section of the jacket from which the lead core is missing. It could not be determined whether specimens Q2 and Q3 are portions of the same bullet or are portions of two separate bullets.

The rifle, K1, is a 8.5 millimeter Mannlicher-Carcano Italian military rifle Model 91/38. Test bullets were fired from this rifle for comparison with specimens Q1, Q2 and Q3. As a result, Q1, Q2 and Q3 were identified as having been fired from the submitted rifle.

Specimens Q6 and Q7 are 8.5 millimeter Mannlicher-Carcano cartridge cases. They were manufactured by the Western Cartridge Company, East Alton, Illinois, as was the 8.5 millimeter Mannlicher-Carcano cartridge, Q8.

Test cartridge cases obtained from the submitted rifle were compared with specimens Q6 and Q7. As a result, specimens Q6 and Q7 were identified as having been fired in this rifle. The bullet, Q13, from Officer Tippett, is a .38 Special copper-coated lead bullet. Q13 weighs 158.6 grains and possesses the physical characteristics of 158 grain Western-Winchester revolver bullets. The surface of Q13 is so badly mutilated that there are not sufficient individual microscopic characteristics present for identification purposes. It was determined, however, that the .38 Special Smith and Wesson revolver, K3, is among those weapons which produce general rifling impressions of the type found on Q13.

The lead metal of Q4 and Q5, Q9, Q14 and Q15 is similar to the lead of the core of the bullet fragment, Q2.

A small tuft of textile fibers was found adhering to a jagged area on the left side of the metal butt plate on the K1 gun. Included in this tuft of fibers were gray-black, dark blue and orange-yellow cotton fibers which match in microscopic characteristics the gray-black, dark blue and orange-yellow cotton fibers composing the Q11 shirt of the suspect. These fibers could have originated from this shirt.

PC-78243 BX

Page 3

(continued on next page)

A single brown viscose fiber and several light green cotton fibers were found adhering to the Q10 paper bag. These fibers match in microscopic characteristics the brown viscose fibers and light green cotton fibers present in the composition of the Q12 blanket and could have originated from this blanket.

It is pointed out, however, that fibers do not exhibit sufficient individual microscopic characteristics to be positively identified as originating from a particular source to the exclusion of all others.

No fibers were found on the K1 gun that could be associated with the Q12 blanket and no fibers were found on the Q10 paper bag that could be associated with the Q11 shirt.

The debris, including foreign textile fibers and hairs, removed from the Q12 blanket and Q11 shirt has been placed in pillboxes for possible future comparisons. These pillboxes and the glass microscope slides containing fibers removed from K1 and Q10 are being temporarily retained in the Laboratory for possible future comparisons with additional items of the suspect's clothing should they be recovered.

The Q12 blanket has been folded double and one corner has been folded in and pinned with a safety pin. A length of white cotton cord has been tied around this corner giving it a triangular-shaped appearance as if it had once contained a long object.

The paper of the wrapping and the tape, Q10, were found to have the same observable physical characteristics as the known wrapping paper and tape, K2, from the Texas Public School Book Depository.

The inside surface of specimen Q10 did not disclose markings identifiable with the rifle, K1. A number of indentations, folds and extraneous markings appear on the inner surface of the Q10 wrapping.

The latent prints appearing in the photograph taken of the rifle, K1, by the Dallas Police Department, are too fragmentary and indistinct to be of any value for identification purposes. Photographs of this weapon taken by this Bureau also failed to produce prints of sufficient legibility for comparison purposes.

Page 4

PC-78243 BX

1120-1120 FROM  
DEC 1 1975  
(continued on next page) UJ  
6



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A latent fingerprint was developed on the wrapping paper, Q10, which was identified with the left index finger impression of Lee Harvey Oswald. In addition, one latent palm print developed on specimen Q10 was identified with the right palm print of Oswald.

No latent prints of value were developed on Oswald's revolver, the cartridge cases, the unfired cartridge, the clip in the rifle or the inner parts of the rifle.

Specimens Q1 through Q5, Q14 and Q15 are being retained in the Laboratory until called for by a representative of the U. S. Secret Service.

Specimens Q6 through Q13, K1, K2 and K3 are being returned to the Dallas Police Department by Special Agent Vincent E. Drain of the Dallas Field Office of this Bureau. The photograph of the latent print on the rifle is being returned separately. The fingerprints and palm prints of Oswald are being retained.

#### ADDENDUM TO FBI, DALLAS:

You should attempt to obtain the remaining items of clothing suspect is believed to have worn during the shooting for comparisons with the other fibers found on the K1 gun. You should also obtain fingernail scrapings from the suspect for examination to determine if any fibers are contained therein which match the fibers in the Q12 blanket.

PC-78243 BX

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Reference copy, JFK Collection: HSCA (RG 233)

Antimony Determination  
 Sb<sup>124</sup> - Counts = T 1/2

Sample	weight * Mg.	Sb ppm	Deviation from mean: D	D <sup>2</sup>	Standard deviation
A	7.16	643	- 54	2916	
B	4.2	636	- 61	3721	
C	1.79	750	+ 53	2809	
Q1 D	1.24	749	+ 52	2704	
E	3.74	755	+ 8	64	
Avg		697			1742
Q1 E **	1.16	749			
A	39.75	521	- 13	169	
Q2 B	21.6	521	- 13	169	
C	3.84	578	+ 44	1936	
D	3.68	515	- 19	361	
Avg		534			2903
Q4,5					
S	3.22	555	- 6	36	
L <sub>a</sub>	6.85	552	- 9	81	
L <sub>b</sub>	21.15	532	- 29	841	
L <sub>c</sub>	18.25	606	+ 45	2025	
Avg		561			3152
A	1.92	690	+ 18	324	
Q9 B	2.07	662	- 14	196	
S	1.34	677	+ 1	1	
Avg		676			1614

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Antimony Determination (cont'd) in Lead Specimen

Sample	Weight* mg	Sb P.P.M.	DEVIATION FROM MEAN	D	D <sup>2</sup>	STANDARD DEVIATION
S	10.65	543	-	19	361	
S(b)	9.70	582	+	20	400	
Q1/La	5.78	546	-	16	256	
Lb	3.77	552	-	10	100	
Lc	2.85	587	+	25	625	
Avg		562				

\* Represents the weight after surface was swaged.

\*\* Sample swaged for second time and re-run.

$$\text{Standard deviation} = \sqrt{\frac{\sum D^2}{n-1}}$$

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Statistical Determinations: Using conversion factor when comparing results is comparable to T<sub>h</sub>

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Sub	Weight mg	A9 PPM	DEVIATION	D <sup>2</sup>	STANDARD DEVIATION
Q1 a	5.0	9.19			
b	5.7	9.61	- .21	.0441	
Avg		9.40	+ .21	.0441	
					.297
Q2 a	41.8	8.09	+ .16	.026	
b	25.2	9.15	+ .22	.49	
c	4.57	7.22	- .71	.50	
d	3.89	7.24	- .69	.48	
Avg		7.93			
					.912
S	3.8	8.95	+ .48	.230	
Res La	13.0	8.33	- .14	.020	
Lb	21.5	8.13	- .39	.156	
Avg		8.47			
					.428
Q3 a	2.3	9.21	- .04	.0016	
b	2.3	9.29	+ .04	.0016	
		9.25			
					.057
S	10.9	8.63	+ .17	.03	
Q1+ La	8.5	8.40	- .06	.0036	
Lb	4.7	8.34	- .12	.0144	
		8.46			
					.155