Dear Jim, 3.20/95

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 ~~of~~ neutron activation analyses.

~~The~~ There are also some glairing 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 Gyril or Chip.

Thanks and best,

Gerald

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.

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JFK ASSASSINATION SYSTEM

IDENTIFICATION FORM

AGENCY INFORMATION

AGENCY : SSCIA
RECORD NUMBER : 157-10011-10108

RECORDS SERIES :
REPORT

AGENCY FILE NUMBER :

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 : O
DATE OF LAST REVIEW : 03/24/94

OPENING CRITERIA :

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

SSCI Box 337, Folder 12

Record Number 157-10011-10108

K 1954

VI - C - 5 - D2

4/5/77
EG

SENATE SELECT COMMITTEE REQUEST
November 21, 1975

November 6, 1975
Item #4

OR DELIVERY

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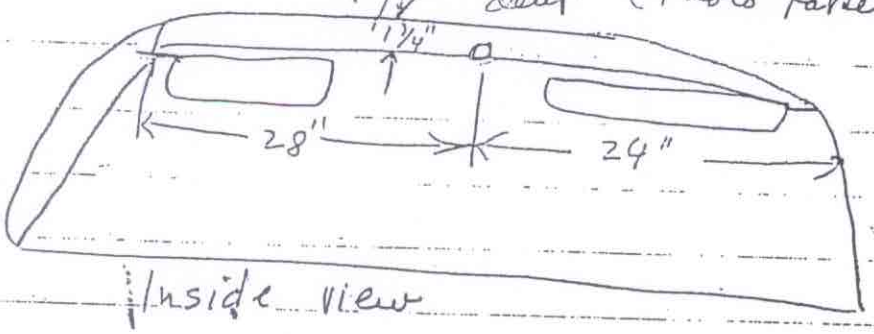
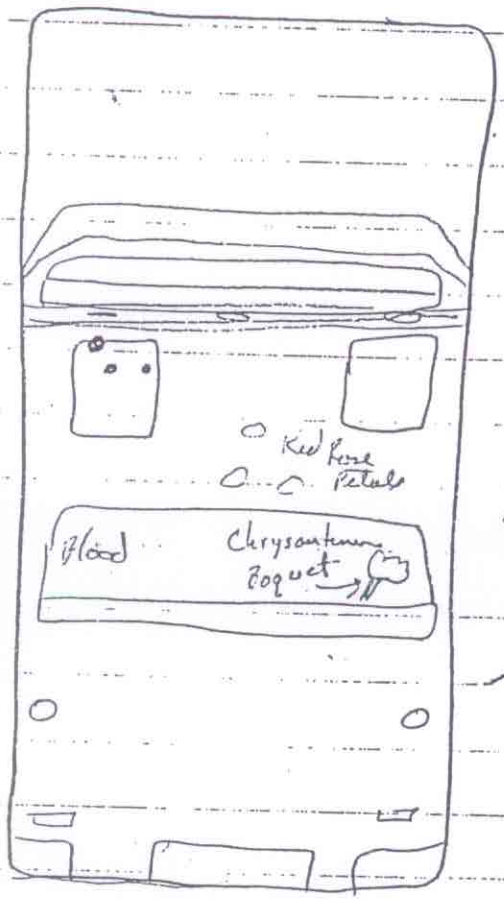
PC78243

PC - Secret Ser. Gar Finish Presid. Limousine 1:30 AM 11/23/

chrome strip 1/4" dent (Photo taken) No direction indicated



Inside view



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

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

No other frags. found in car
No bullet holes found

FROM

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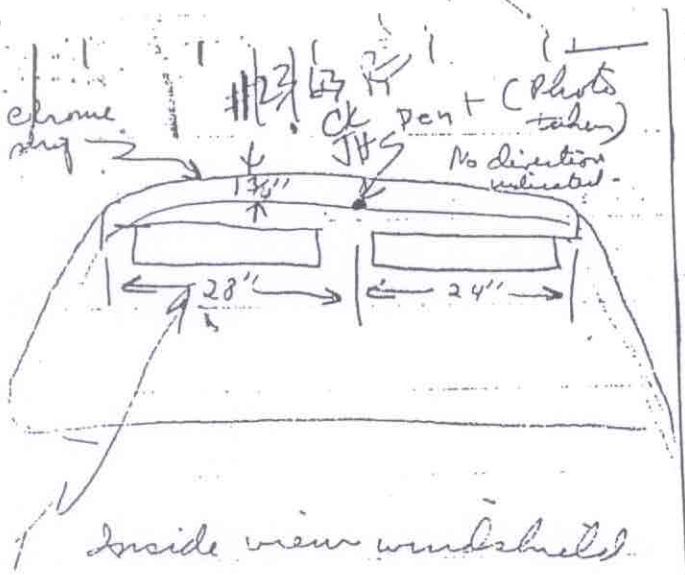
Reference copy, JFK Collection. NOVA (AR 2???)

Reference copy, [illegible]



Inside view windshield

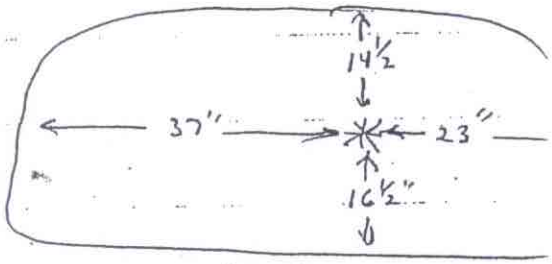
Ck JHS Dent (Photos taken)

No direction indicated.

11/23

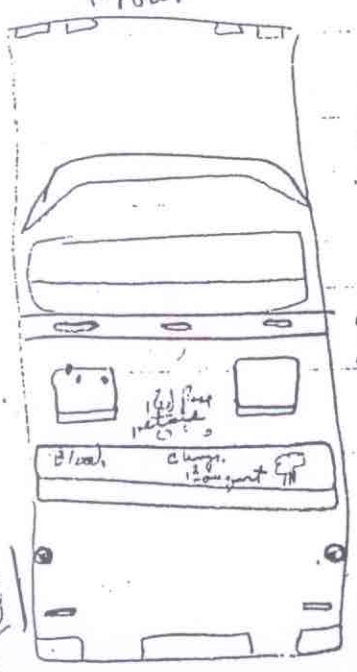
1:30 am

Exam car -



outside view

Front



Blood, tissue or bone frag. scattered over interior of car & on hood - on visor (both sides) & Rt mirror

3 Frags Lead found on Rear Floorboard. 2 on Rug, 1 in seat hinge channel (Jumps seat.

No other Frags. found in car,

No bullet holes found tags not torn out

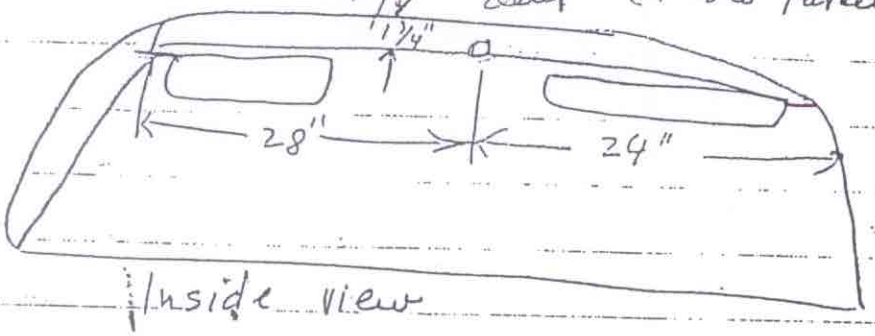
7C

15

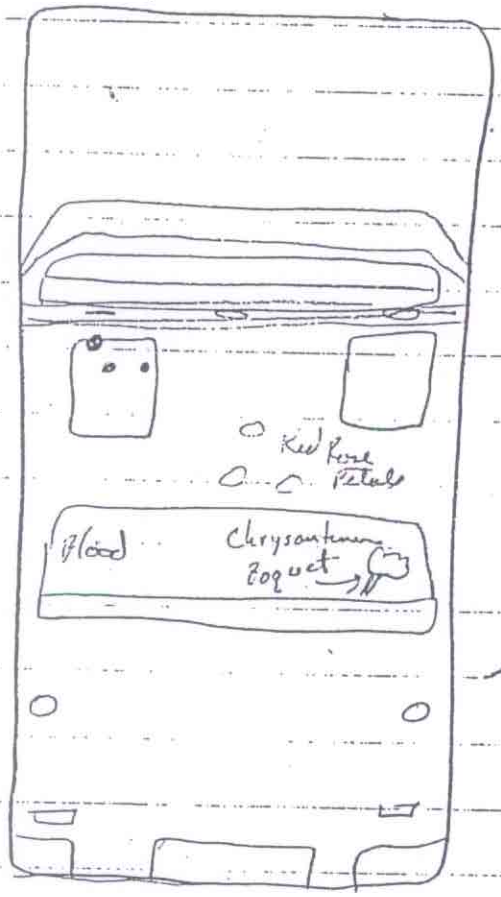
PC78243

PC - Lincoln Sev. Gar Finish Presid. Limousine 1:30 AM 11/23/

chrome strip) ½ dent (Photo taken) No direction indicated



Inside view



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

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

No other frags. found in car
No bullet holes found

FROM

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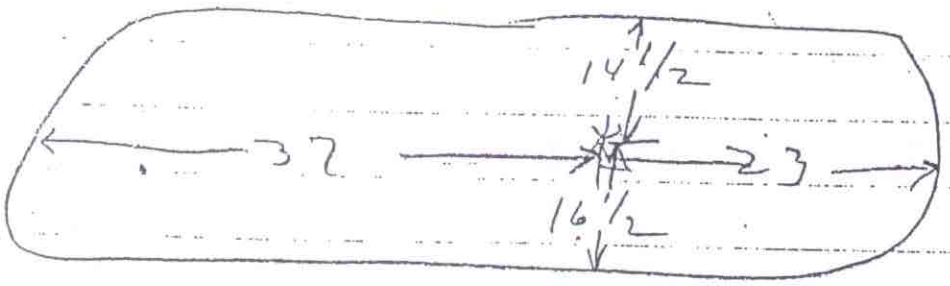
Limousine 11/23/63 PC 7824



1 Liner resembling lead on inside

2 Cracks on outside - stellate (radiating)

3 Pointed fragments missing from outside

Struck by projectile on inside surface

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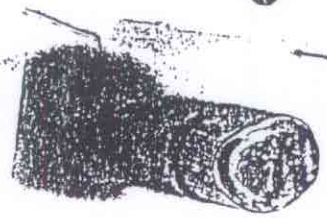
Killion
Frazier
Cunningham
243

D 43646 AX

11/22/63
11/23/63



Q1 Bullet from stretcher

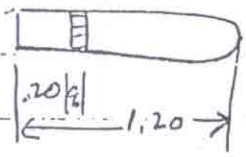
Wt - 158.6 grains

C-1) Type MC (Non-rifled) 6.5 mm Mannlicher-Carcano (Italian) Solid Pt

L + G - 4 Rt

Land - .07

Groove - .13



07
13
20
x4
80 US
chart .796 4R

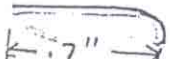
Mfg: ≅ to W.C.C. ___ gr

2) Bullet fragment from seat area driver

Wt 44.6 grains - No cannelure

Type Nose portion of MC-C with lead - full metal jacket type

Land 07
Gr 13 } ± 1.5 mm + 2 lands



x4 = 80 = 6.5

21.0
65.6 gr
44.6

3) Bullet from beside front seat

Wt = 21.0 gr

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

L+G - 4 Rt

Land .07

Groove 13 x4=80 US chart for 6.5 mm

Q2 + Q3 Should be from one or two bullets.

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Q4) Lead frag from head - 1.65 grains 11/23 Bethesda. No Val; Spectro Exam

" " " " " .15 gr " " " " By Some - See Gitt W.S. Return + 02 - for Q1.

(#1 from floor in left side jumpseat 00.9 gr
" " " " " 00.7
" " " " " 00.7) No Value

#3 " " " " " Q4

Q9 Lead frag .5 grs - Gov. area Q9 No Value

7

14

Lab report
To Chief Dallas Nov 23, 1963

7-2

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
GALLAGHE

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 ffom the President's head

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13

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 Nesson 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 Scrapping from inside surface of windshield

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

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WJJ

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Carbon

	Fe	Pb	Sb	Mg	Sn	Bi	Cu	Ag	Fe
1			<.08 >.009 <.08	Mg tr	<.008	≤.05	Cu .04	<.005	Fe tr <.0
2			>.009 <.08	Mg tr	<.008	≤.05	Cu .04	<.005	Fe tr <.0
3			>.009 <.08	Mg tr	<.008	≤.05	Cu .04	<.005	Fe tr <.0
4			>.009	Mg tr	<.008	≤.05	Cu .04	<.005	Fe tr <.0
5		.0035	.009		—	.05	.041		
6		.007	.009		.008		.0015		
7		.007	.009		.008	.032	.0018		
		As	Sb		Sn	Bi	Cu	Ag	

(1) larger piece from Q4 & Q5
(2) largest piece Q14
(3) From Lead Q9
(4) lead from Q2
(5) Std. A101
(6) Std A104
(7) Std A104

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10 sec Pre burn Low Arc.
1 min 20 sec H Arc. Exposure
PC-78243

11

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 Col Q2

45 – 8 Lead from Col Q2

42 – 9 Scrapings from inside Windshield Q15

Pb Pb Cu

PC-78243

Nov 23 1963

RELEVANT

10

Reference copy, JFK Collection: HSCA (RG 233)

Reference copy, JFK Collection: HSCA (NO 2007)

FD-1a (Rev. 9-7-60)

REPORT
of the

FBI LABORATORY

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 criminal prosecution. Authorization cannot be granted for the use of the Laboratory report in connection with a civil proceeding.

J. Edgar Hoover
John Edgar Hoover, Director

Re: ASSASSINATION OF PRESIDENT
JOHN F. KENNEDY

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 Analyes - 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

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

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

MAIL ROOM ☐ TELETYPE UNIT ☐

(continued on next page)

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.

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PC-78243 BX

(continued on next page)

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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 6.5 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 6.5 millimeter Mannlicher-Carcano cartridge cases. They were manufactured by the Western Cartridge Company, East Alton, Illinois, as was the 6.5 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

(continued on next page)

Reference copy, JFK Collection: HSCA (RG 233)

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.

PC-78243 BX

(continued on next page)

Reference copy, JFK Collection: HSCA (RG 233)

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.

Reference copy, JFK Collection: HSCA (RG 233)

Antimony determinations
Sb^{124} · 60 days : $T_{1/2}$

Sample	weight* Mg.	Sb PPM	Deviation from mean: D	D^2	Standard deviation
A	7.16	643	- 54	2916	
B	4.2	636	- 61	3721	
C	1.79	750	+ 53	2809	
Q_1 D	1.24	749	+ 52	2704	
E	3.34	755	+ 8	64	
Avg.		697			17.42
Q_1 E **	1.16	749			
A	39.75	521	- 13	169	
B	21.6	521	- 13	169	
Q_2 C	3.84	578	+ 44	1936	
D	3.68	515	- 19	361	
Avg		534			29.63
$Q_{4,5}$					
S	5.22	555	- 6	36	
La	6.85	552	- 9	81	
Lb	21.15	532	- 29	841	
Lc	.825	606	+ 45	2025	
Avg.		561			31.52
A	1.92	690	+ 18	324	
Q_3 B	2.07	662	- 19	196	
S	1.34	677	+ 1	1	
Avg		676			16.14

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Antimony determinations (cont'd) in lead specimens

Sample	Weight* mg	Sb ppm	Deviation from mean D	D^2	Standard Deviation
S	10.65	543	- 19	361	
S(6)	9.70	582	+ 20	400	
Q/14 La	5.78	546	- 16	256	
Lb	3.77	552	- 10	100	
Lc	2.85	587	+ 25	625	
Avg		562			20.87

* Represents the weight after analyses were completed.

** Samples arranged for a second determination.

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

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3

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Elem. Determinations: Using correction factor when Co-Ti-2 is comparable to T'h.

Sa		Sample wt mg	Ag ppm	Deviation from mean D	D^2	Standard Deviation
Q_1	a	9.0	9.19	-.21	.0441	
	b	5.7	9.61	+.21	.0441	
	Avg		9.40			.297
	a	11.2				
Q_2	b	25.2	8.09	+.16	.026	
	c	4.57	9.15	+.22	.149	
	d	3.89	7.22	-.71	.504	
	Avg		7.24	-.69	.476	
			7.93			.912
	S	3.8				
Pres	La	13.0	8.95	+.48	.230	
	Lb	21.5	8.33	-.14	.020	
	Avg		8.13	-.34	.1156	
	d		8.47			.428
Q_3	a	2.3	9.21	-.04	.0016	
	b	2.3	9.29	+.04	.0016	
			9.25			.057
	S	10.9				
Q_{14}	La	8.5	8.63	+.17	.03	
	Lb	4.7	8.40	-.06	.0036	
			8.34	-.12	.0144	
			8.46			.155

2