

RECORDED
11/26/63 KO

FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE

Laboratory Work Sheet

REASSASSINATION OF PRESIDENT
JOHN F. KENNEDY

File #
Lab. # PC-73243 BX 37

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

Examination requested by:

Examination requested: Firearms - Spectro. -
Result of Examination: Microscopic - Fingerprint

Date received:

Examination by: FRAZIER
STONBAUGH
GALLAGHER

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. Sibart and
Special Agent Francis O'Neill, Jr., of the Baltimore Office of
the FBI on 11/22/63:

Q4 Metal Fragment from 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 mm Mannlicher-Carcano cartridge case from building
- Q7 6.5 mm Mannlicher-Carcano cartridge case from building
- Q8 6.3 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. S3243

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

RECORDED
12/4/63
bmm

FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE

Laboratory Work Sheet

Re: EDWIN A. WALKER
INFORMATION CONCERNING

File #
Lab. # PC-78373 BX HB

Examination requested by: SAC, Dallas (157-218)

(let 12/2)

Examination requested: Firearms (guns and ammu)
Result of Examination: Spectrographic

Date received: 12/24/63 hz

Examination by: Frazier
Heibergers

Specimens submitted for examination

Q188 Bullet from Edwin A. Walker's residence

*2 photos attached -
Heibergers run*

| | 3/10/64 | Sn | Sr | Pb | Ca | Ag |
|-----|---------|----|----|----|----|----|
| 1/2 | St | 0 | - | + | - | + |
| 1/2 | 15 | 0 | 15 | + | - | + |
| 1/2 | - | 0 | 15 | + | - | + |

JA #3 4/10 40 sec High Over Keros

| | Sh | As | Sm | Pl | Bi | Cu | Mg | Zn | Sr | Fe | Ag |
|--------------------|-----|----|-----|----|----|----|-----|----|-------|-------|----|
| 89 Copper bullet | 0 | 0 | - | - | 0 | ++ | + | + | + | + | - |
| 1 " | | | + | + | | ++ | | + | | | |
| 2 " | | | + | - | | ++ | | + | | | |
| 3 " | | | + | - | | ++ | | + | | | |
| Q 188 low Keros | | | + | - | | ± | | + | | | |
| Keros bullet " | | | - | + | | ++ | | + | | + | - |
| Fe | | | ≡ | | | ≡ | | ≡ | | | |
| Q 188 Lead alloy | 0 | | 1/2 | ++ | ± | - | 1/2 | 0 | + | 1/2 | - |
| Q 1 " | - | | 0 | | | | | | after | after | |
| Q 2 " | - | | | | | | | | + | after | |
| Q 188 " | 0 | | | | | | | | after | ± | |
| Keros bullet " | 1/2 | | | | | | | | 0 | 0 | |
| Keros bullet " | 1/2 | | | | | | | | + | after | |
| Fe | | | ≡ | | | ≡ | | | | | |

Process Q 188 & Keros bullet from top of S

Lead Q 188 low trace of Sh
(Produced in 3 bullet for spectrum)

Q 188 bullet (Lead)

Q 3 bullet (Lead)

Carbon

| Fe | Pb | Sb | Mg | Sn | Pb | Cu | Ag | Fe | Se |
|----|-------|------------------------|------------|----------|------------|-----------|----------|------------------|----|
| 1 | | $\leq .08$ $> .009$ | M_4^{tr} | $< .008$ | $\leq .05$ | $Cu .004$ | $< .005$ | $Fe^{tr} < .001$ | |
| 2 | | $\leq .08$ $> .009$ | M_4^{tr} | $< .008$ | $\leq .05$ | $Cu .004$ | $< .005$ | $Fe^{tr} < .001$ | |
| 3 | | $\leq .08$ $> .009$ | M_4^{tr} | $< .008$ | $\leq .05$ | $Cu .004$ | $< .005$ | $Fe^{tr} < .001$ | |
| 4 | | $\leq .08$ $> .009$ | M_4^{tr} | $< .008$ | $\leq .05$ | $Cu .004$ | $< .005$ | $Fe^{tr} < .001$ | |
| 5 | .0035 | .009 | | - | .05 | .041 | | | |
| 6 | .007 | .009 | | .008 | | .0018 | | | |
| 7 | .007 | .009 | | .008 | .032 | .0018 | | | |
| | AS | Sb | | Sn | Pb | Cu | Ag | | |

- (1) larger piece from Q14
- (2) largest piece Q14
- (3) From head Q9
- (4) head from Q2
- (5) Std. A10J
- (6) Std A10K
- (7) Std A10L

10 sec Pre burn low Air.
1 min 20 sec H Air. E

PC-78243

203

72 C. Control

69 Fe:Acc

- 66 - 1 From larger piece of Q4 + Q5 lead Head of JER
- 63 - 2 From larger piece of Q4 + Q5 lead Head of JER
- 60 - 3 From largest piece Q14 (lug in front of jump seat)
- 57 - 4 From largest piece Q14 (lug 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 Q1
- 45 - 8 lead from car Q2
- 42 - 9 Scrapings from inside windshield. Q15

Pb Pb Cu

PC-78243

Nov 23 1963

Recorded
8-7-64 cmj

FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE

Laboratory Work Sheet

Re: LEE HARVEY OSWALD, aka
IS - R - CUBA

Examination requested by: President's Commission

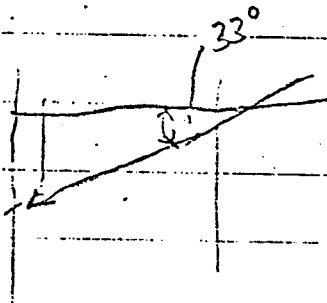
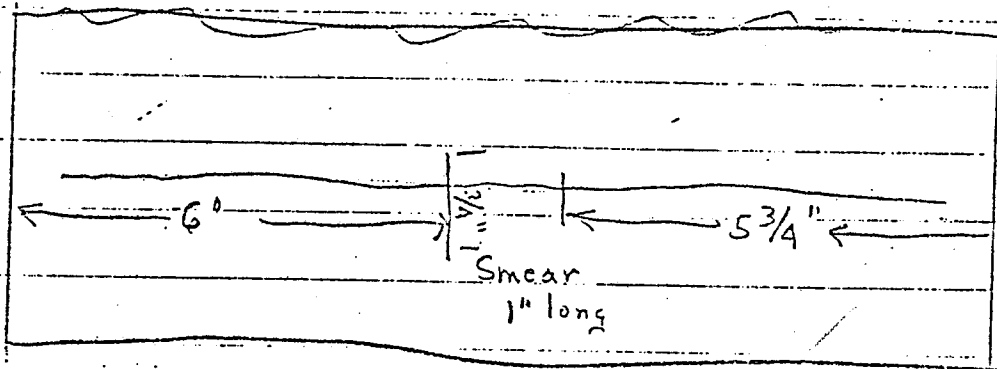
Examination requested: ~~Photographic~~ ^{Electron Microscopic}
~~Microscopic~~
Firearms

Result of Examination:

Specimens submitted for examination

609 ~~Request for location and examination of mark on curbing at assassination~~
site Piece of curbing.

Small foreign metal smears (see attached for location) were run spectrophotically (Spectro-chem) & found to be essentially lead with a trace of antimony - could be bullet metal. No copper observed.



Intermy Inter...
 5¹² - 60.00 = T 1/2

| Sample weight | Mo. | So 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 | 725 | + 18 | 64 | | |
| Avg | | 697 | | | | 17.97 |
| Q ₁ = ** | 1.16 | 749 | | | | |
| A | 39.75 | 521 | - 13 | 169 | | |
| B | 21.6 | 521 | - 13 | 169 | | |
| Q ₂ C | 5.84 | 577 | + 44 | 1936 | | |
| D | 3.68 | 515 | - 19 | 361 | | |
| Avg | | 534 | | | | 29.65 |
| Q ₃ S | | | | | | |
| S | 3.22 | 555 | - 6 | 36 | | |
| L ₂ | 6.85 | 552 | - 9 | 81 | | |
| L ₃ | 21.15 | 532 | - 29 | 841 | | |
| L ₄ | .825 | 606 | + 45 | 2025 | | |
| Avg | | 561 | | | | 36.52 |
| A | 1.92 | 690 | + 18 | 324 | | |
| Q ₄ B | 2.07 | 662 | - 19 | 361 | | |
| S | 1.39 | 677 | + 1 | 1 | | |
| Avg | | 676 | | | | 16.18 |

C. ... (in ...)

| Weight # | Mg | Sb | D | D ² | Σ D ² |
|------------|-------|-----|------|----------------|------------------|
| | 10.65 | 543 | - 19 | 361 | |
| a) | 9.70 | 532 | + 20 | 400 | |
| La | 5.78 | 546 | - 16 | 256 | |
| Lb | 3.97 | 552 | - 10 | 100 | |
| Lc | 2.85 | 587 | + 25 | 625 | |
| <i>Avg</i> | | 562 | | | 2087 |

* Represents the weight after surface was scraped

** Sample scraped for several times and re-dun.

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

Handwritten Title: Unclassified Data
Handwritten Subtitle: T 1/2

| | mg | ppm | | D | |
|-------------------|------|------|-------|-------|-------|
| j a | 8.9 | 9.19 | - .21 | .0441 | |
| j b | 5.7 | 9.61 | + .21 | .0441 | |
| Aug | | 9.40 | | | .297 |
| a | 41.9 | 8.09 | + .16 | .025 | |
| Q ₂ b | 25.2 | 9.15 | + .22 | .149 | |
| c | 45.7 | 7.22 | - .31 | .150 | |
| d | 3.89 | 7.24 | - .69 | .548 | |
| Aug | | 7.93 | | | .912 |
| S | 3.8 | 8.75 | + .48 | .230 | |
| Q ₂ La | 13.0 | 8.33 | - .14 | .020 | |
| Lb | 21.5 | 8.13 | - .34 | .1156 | |
| Aug | | 8.47 | | | .428 |
| d | | | | | |
| Q ₂ a | 2.3 | 9.21 | - .04 | .0016 | |
| b | 2.3 | 9.29 | + .04 | .0016 | |
| Aug | | 9.25 | | | .0517 |
| S | 10.9 | 8.63 | + .17 | .03 | |
| Q ₂ La | 8.5 | 8.40 | - .06 | .0036 | |
| Lb | 4.7 | 8.34 | - .12 | .0144 | |
| Aug | | 8.46 | | | .155 |