

previously submitted in this case. The dent contains microscopic marks of the type which could be produced by the side of the barrel at the muzzle but insufficient marks for identification were left on the board due to the physical nature of the wood. The microscopic marks present are different from the type which would be produced by the duck-bill pliers or jack hammer which were in the blue zipper bag previously submitted. No other marks were found on the board.

No gunpowder or gunpowder residues were found on the Q71 board.

No wood, paint, aluminum or other foreign material was found on the rifle barrel nor were any significant marks found on the rifle barrel.

1- Q 78 (1)	Flash mint cont	Pb
2- Q 78 (2)		Pb
3- Q 78 (3)		Pb
4- Q 78 (4) <u>Central</u>		-
5- Q 76 (1)	white mint	Pb
6- Q 76 (2)		Pb
7- Q 76 (3) <u>Central</u>		-
8- Q 77 (1)	NECK TIE	Pb
9- Q 77 (2)		Pb
10- Q 77 (3) <u>Central</u>		-

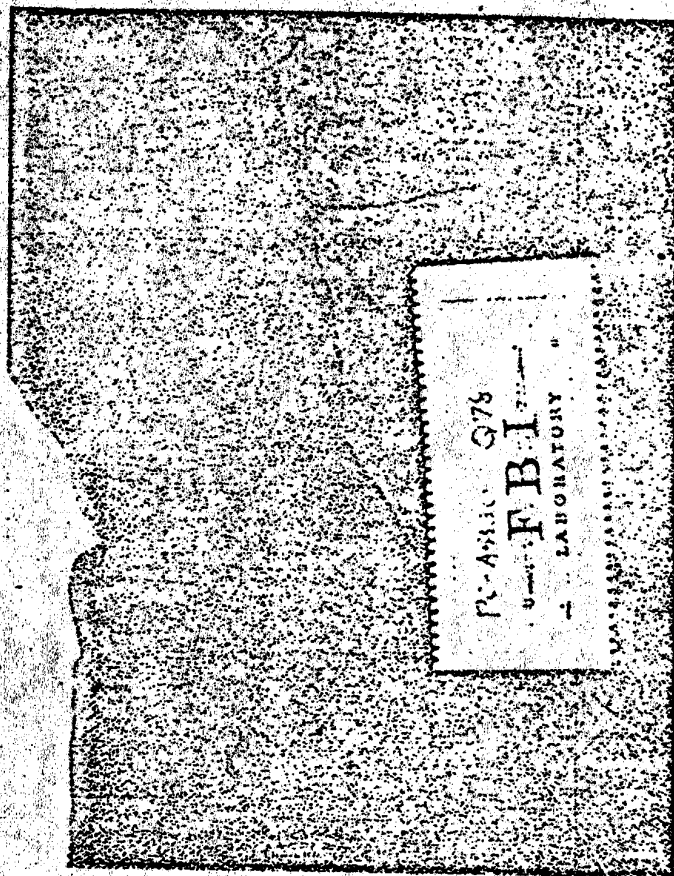
April 11 1968

BLACK SUIT COAT - Q 78

Q 78 #1 →

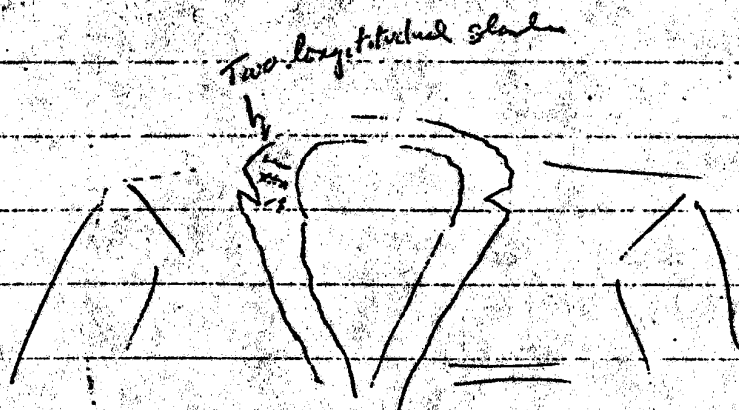
Q 78 #2 →

Q 78 #3 →



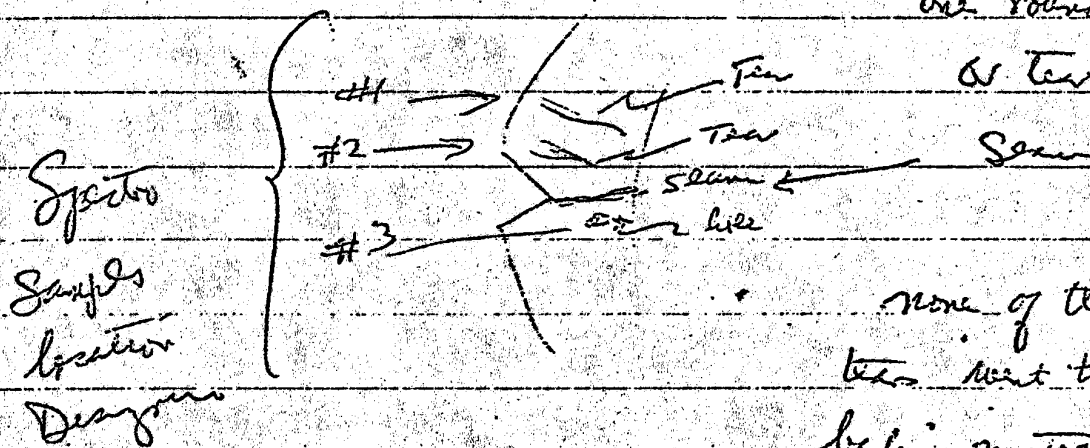
Q 78

#4 Control taken from upper right sleeve of suit coat.



Black suit coat had  
two longit. tears on  
collar (right side) just  
above the V cut on collar

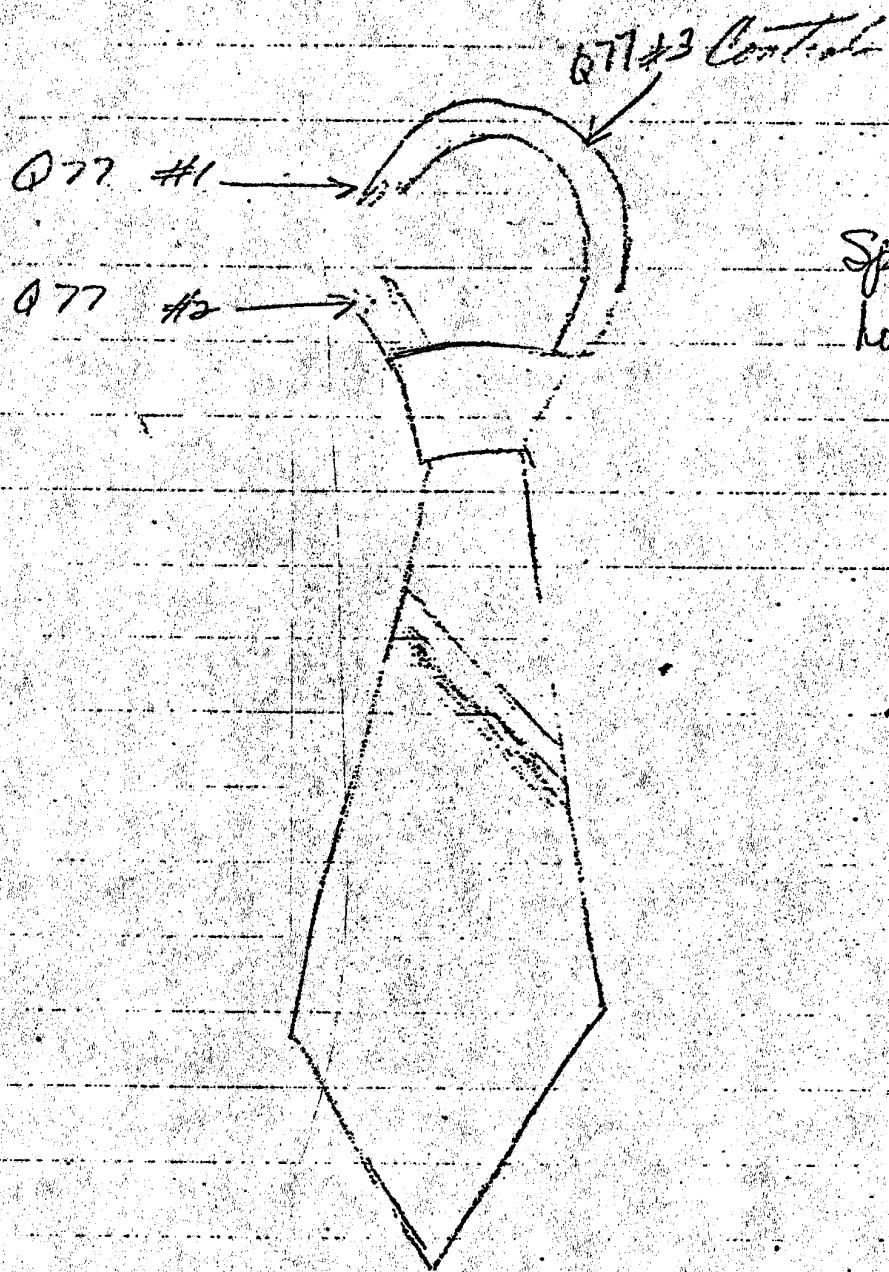
One round shaped hole  
or tear just below



none of these holes or  
tears went through the  
backing material or the  
collar of the coat



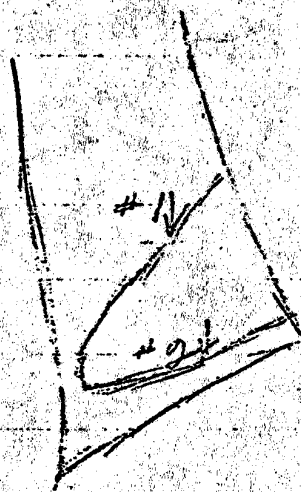
MECH 15 - Q 77



Spectro Sample  
Location Diagram

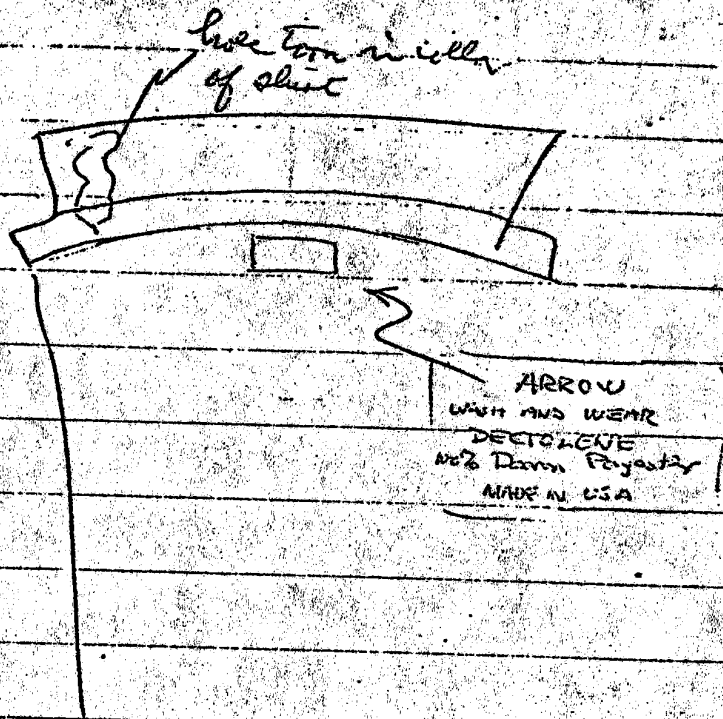
WHITE SHIRT - Q 76

SHIRT COLLAR



Spectro Samples  
Location Diagram

# 3 is control from back of shirt in bloody area.





FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C. 20535

To: FBI, Memphis  
Re: MURKIN

Date: April 29, 1968  
FBI File No.  
Lab. No.

Specimens received  
4/5/68

For a complete listing of the evidence, refer to  
Laboratory report previously submitted to the  
Memphis Office.

Results of examination:

The lead cores of the bullets in the five cartridges,  
Q4 through Q8, were found to vary in composition even though  
they were all from the same manufacturer.

The core portion of the Q64 bullet fragment from the  
victim's body is similar in composition to the lead core of  
the bullet in the cartridge designated Q4 and could have come  
from a source such as represented by the lead core of the  
bullet in Q4.

The bullet jacket portion of specimen Q64 is similar  
in composition to the metal of the jackets of the bullets in  
the Q4 through Q8 cartridges and could have come from the  
source represented by these bullets.

# KING CASE Bullet Leads

C	27	
Fe	75	
Q44 = 1.56 mg	23	$S_i^{+} Sb^{-} N_y^{+} Pb^{+} Fe^{+} Bi Cu Ag Sn^{+}$
Q4 = 1.50	71	$S_i^{+} Sb^{-} N_y^{+} Pb^{+} Fe^{+} Bi Cu Ag$
Q5 = 1.47	69	$S_i^{+} Sb^{-} N_y^{+} Pb^{+} Fe^{+} Bi Cu Ag$
Fe	67	
Q6 = 1.49	65	$S_i^{+} Sb^{-} N_y^{+} Pb^{+} Fe^{+} Bi Cu Ag$
Q7 = 1.54	63	$S_i^{+} Sb^{-} N_y^{+} Pb^{+} Fe^{+} Bi Cu Ag$
Q8 = 1.52	41	$S_i^{+} Sb^{-} N_y^{+} Pb^{+} Fe^{+} Bi Cu Ag Sn^{+}$

April 19 1968

A



# KING CASE COPPER JACKETS

C

29

E

27

Q64 (1.87 mg) 25  $B^+ Al^{3+} Si^{4+} Fe^{2+} Cu^+ Ag^+ Zn^-$   
 Q4 (1.80 mg) 23  $B^+ Al^{3+} Si^{4+} Fe^{2+} Cu^+ Ag^+ Zn^-$   
 Q5 (1.81 mg) 21  $B^+ Al^{3+} Si^{4+} Fe^{2+} Cu^+ Ag^+ Zn^-$

Fe

19

Q6 (1.79 mg) 17  $B^+ Al^{3+} Si^{4+} Fe^{2+} Cu^+ Ag^+ Zn^-$   
 Q7 (1.81 mg) 15  $B^+ Al^{3+} Si^{4+} Fe^{2+} Cu^+ Ag^+ Zn^-$   
 Q8 (1.80 mg) 13  $B^+ Al^{3+} Si^{4+} Fe^{2+} Cu^+ Ag^+ Zn^-$

April 19 1968

B

C 73

Fe 71

Q64 69 = 1.565mg Sb<sup>-</sup> As<sup>6+</sup> Mg<sup>+</sup> Pb<sup>+</sup> Si Fe<sup>+</sup> Bi<sup>+</sup> Sn<sup>+</sup>

Q4 67 = 1.545mg Sb<sup>-</sup> As<sup>6+</sup> Mg<sup>+</sup> Pb<sup>+</sup> Si Fe<sup>+</sup> Bi<sup>+</sup> -

Q64 65 = 1.670mg Sb<sup>-</sup> As<sup>6+</sup> Mg<sup>+</sup> Pb<sup>+</sup> Si Fe<sup>+</sup> Bi<sup>+</sup> -

April 22 1968

C

SAMPLE	wrt.	µg Sb	% Sb	
Q64A	9.86 mg	132	1.34	1.37 % G = .12 Rel. G = 9%
Q64B	10.54	133	1.26	
Q64C	8.49	127	1.50	
Q4A	9.90	156	1.58	1.52 % G = .07 Rel. G = 5%
Q4B	9.06	131	1.45	
Q4C	8.14	124	1.52	
Q5A	9.54	207	2.17	2.11 % G = .06 Rel. G = 3%
Q5B	9.46	199	2.10	
Q5C	8.50	175	2.06	
Q6A	9.68	220	2.27	2.29 % G = .07 Rel. G = 3%
Q6B	9.63	218	2.37	
Q6C	9.60	214	2.23	
Q7A	10.00	68	.68	.71 % G = .03 Rel. G = 4%
Q7B	8.42	62	.74	
Q7C	9.75	70	.72	
Q8A	9.60	110	1.15	1.06 % G = .08 Rel. G = 8%
Q8B	9.30	95	1.02	
Q8C	9.18	92	1.00	

According to Remington-Peters, there are  
no spec. sent for core lead.

of the



FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C.

To: FBI, Memphis

Date:

April 17, 1968

Re: MURKIN

FBI File No.

Lab. No.

Specimens received

For a listing of the evidence  
see attached pages.

DELIVERED APRIL 5, 1968 BY

MEMPHIS OFFICE

Submitted by Airtel #1 as recovered by Inspector N. E. Zachary,  
Memphis Police Department in vicinity of 424 South Main Street:

- Q1 Rifle box for Browning .243 Winchester caliber rifle,  
Serial Number 4744Z5
- Q2 .30-06 Springfield caliber Remington "Gamemaster" slide-  
action rifle, Model 760, Serial Number 461476, with Redfield  
telescope sight, Serial Number A17350, with clip
- Q3 .30-06 Springfield caliber Remington-Peters cartridge case
- Q4-Q12 Nine .30-06 Springfield caliber cartridges (five Remington-  
Peters and four R-A-55) in Peters cartridge box, Index  
Number 3033
- Q13 Large green and brown cloth

Submitted by Airtel #2 as recovered by Inspector N. E. Zachary,  
Memphis Police Department in vicinity of 424 South Main Street:

- Q14 "Banner" binocular (Bushnell) 7 by 35, Serial Number DQ408664  
(allegedly in zipper bag when recovered)
- Q15 Zipper bag

ITEMS FROM OUTSIDE COMPARTMENT OF ZIPPER BAG

- Q16 Duck-bill pliers and tack hammer marked "MAGNETIC"
- Q17 Box of "BAND-AID sheer strips"
- Q18 Georgia-Alabama Standard Oil map
- Q19 "Commercial Appeal" Memphis newspaper, first  
section only, issue of April 4, 1968
- Q20 Standard Oil map of the United States



ITEM INSIDE ZIPPER BAG, IN POCKET

Q21 Partial roll of toilet paper

ITEMS LOOSE INSIDE ZIPPER BAG

Q22 Binocular case with instruction booklet, lens cloth and guarantee card

Q23 Binocular box, cardboard

Q24 "Gillette" travel kit purchased at Oliver Rexall Store, Whitehaven, price \$1.89, with razor, lotion shaving cream, deodorant, hair cream and razor blade in dispenser

Q25 Gray paper sack bearing marking "YORK ARMS CO." with receipt dated 4-4-68 in amount of \$41.55

Q26 White and yellow towel

Q27 White handkerchief

Q28 Tube of "Colgate" toothpaste

Q29-Q30 Pair of black socks

Q31 Seven-ounce can of "RIGHT GUARD" deodorant

Q32 Channel Master radio

Q33 Bottle of "BUFFERIN"

Q34 Elastic belt

Q35 Tube of "ERYLCREEM"

Q36 Bottle of "ONE A DAY" vitamins

Q37 Small bar of "Cashmere Bouquet" soap

Q38 Hairbrush

Q39 Bar of "dial" soap, bath size

Q40 Tube of "Head & Shoulders" shampoo

ITEMS LOOSE INSIDE ZIPPER BAG (continued)

- Q41 Can of brown "KIWI" boot polish
- Q42 Can of "PALMOLIVE RAPID-SHAVE" shaving cream
- Q43 Gray-brown button (in sack with beer)
- Q44 Black button (in sack with beer)
- Q45 Toothbrush, "Pepsodent"
- Q46 Safety razor, without blade
- Q47 Plastic bottle of "MENNEN afta" lotion
- Q48 Small bar of "Cameo" toilet soap
- Q49 Small bar of "Cashmere Bouquet" soap, bearing advertisement of Friendship Inns
- Q50-Q51 Two bobby pins
- Q52-Q53 Two cans of "Schlitz" beer, pull tab
- Q54 Plastic "six-pack" carrying device
- Q55 Brown paper sack (containing beer)
- Q56 Small brown paper sack, empty
- Q57 Key
- Q58 Toothpick
- Q59 Metal ring
- Q60-Q61 Two coat hangers
- Q62 Two links from "ADJUST-O" watchband
- Q63 Gray-brown button

Submitted by Airtel #3:

- Q64 Bullet from body
- Q65 Twenty dollar Federal Reserve Note, Series 1963A,  
Serial Number F14002844A
- Q66 Twenty dollar Federal Reserve Note, Series 1963A,  
Serial Number H16164663A
- Q67 Twenty dollar Federal Reserve Note, Series 1963,  
Serial Number F06445143A
- Q68 Fingerprint card for Bessie Ruth Brewer

Page 4

Results of examination:

FIREARMS - TOOLMARKS EXAMINATIONS

The serial number on the black rifle box, Q1, was determined to be 4744Z5. This box originally contained a .243 Winchester caliber Browning rifle.

The Q3 cartridge case was identified as having been fired in the Q2 rifle. The only marks found on Q3, other than marks made during manufacturing procedures, were one extractor mark which was identified as having been made by the extractor of the Q2 rifle and the marks left on Q3 by the Q2 rifle when Q3 was fired.

The bullet, Q64, from the victim, is a .30 caliber metal-jacketed "soft-point" sporting type bullet of Remington-Peters manufacture which was fired from a barrel rifled with six lands and grooves, right twist. Based on the physical characteristics of the general rifling impressions, the Q64 bullet could have been fired from the Remington rifle, Q2. The Q64 bullet has been distorted due to mutilation and insufficient marks of value for identification remain on this bullet. Therefore, it was not possible to determine whether or not Q64 was fired from the Q2 rifle.

The Q64 bullet is identical in all remaining observable physical characteristics to the 150 grain bullets in the five loaded .30-06 Springfield caliber Remington-Peters cartridges, Q4 through Q8.

Based on physical characteristics, specimen Q64 and the cartridge case, Q3, could originally have been portions of the same cartridge, which would be the same as the Q4 through Q8 cartridges. No marks are present on Q64 of the type which would permit determining positively whether or not the Q64 bullet was originally a portion of the cartridge represented by Q3.

The five cartridges, Q4 through Q8, conform in description to the type of cartridges packaged by the manufacturer in the Peters cartridge box in which they were submitted. Because of the manner in which cartridges are boxed at the factory, it is not possible to determine whether or not the cartridge represented by Q3 or any of the



Q4 through Q8 cartridges were packaged in the same box by the manufacturer.

The Peters cartridge box in which Q4 through Q8 were submitted also contained four U. S. Military cartridges, containing full-metal jacketed 150 grain bullets, different from Q64. The manufacturer's headstamp on these cartridges is "R A 55." The "R A" indicates that these cartridges were manufactured by Remington Arms Company, Incorporated, Bridgeport, Connecticut. Cartridges bearing "55" are those normally manufactured in 1955.

Examination of the four cartridges, Q9 through Q12, revealed no marks indicating these cartridges had ever been loaded into a weapon. The only marks on these cartridges appear to be marks produced by the manufacturer's machines and marks of the type produced by metal-link ammunition belts of the type used with machine guns. The link belt marks on Q9 through Q12 are suitable for comparison with the metal links from which the cartridges were withdrawn. In metal-link belts, each cartridge serves to hold adjacent links together. As each cartridge is withdrawn, a link (which is expendable) separates from the rest of the belt.

No aluminum, screen-type scratches, paint, wood or other foreign material was found on the muzzle or side of the barrel of the Q2 rifle.

No record was located in the National Stolen Property Index or the National Crime Information Center for a Browning rifle, Serial Number 4744Z5, as originally contained in Q1; for the Q2 rifle; for a Redfield 2X-7X variable telescope sight, Serial Number A17350 (which is mounted on Q2), or for the Bushnell binocular, Q14, Serial Number DQ408664.

No serial number which would facilitate tracing was found on the Weaver telescope sight mount and base on Q2. The screws used to secure the sight tube to the mount were "finger" tight. No tool was required to loosen them and no toolmarks of value for comparison are present.

Page 6

(continued on next page)



The magnification setting of the telescope sight tube was "6 $\frac{1}{2}$ x" when the C2 rifle was received. Therefore, objects viewed would be enlarged to approximately 6 $\frac{1}{2}$  times normal size.

Mf. ballistic data for 3006 Spd 150 gr PSP CL R-P  
 (Listed in 1965 Peters Cat. - Listed in 1963 Cat. Peters  
 Not " " 1948 Peters Cat. " " 1965 Rem Cat  
 Listed -> 1955

R-P headstamps origin

Pointed SPCL	Muzzle Vel					Muzzle Energy					Sight in 200 yds				
	100	200	300	400	500	100	200	300	400	500	100	200	300	400	500
150 Hi-Speed	2970	2670	2400	2130	1870	1670	2970	2370	1920	1510	1190	930	1.9	0	-7.5

P 73

30-06 Rifle 1 cm. "Sawmaster" #461476 with scope  
o Lateral 4/5/68 # A 17350 (with cap)

(NR-NCIC or NSPI)

Gun from New York except for few scars on stock & base (1 forearm)

Scope " " (SN bottom of window, adj. plate.)

"Redfield" sticker present on window, adj. cap

" " missing from Elev. " "

Redfield Gunsight Co

1315 South Clarkson

(Not listed as policy in 1970)

Denver, Colo 80210

-Standard Weaver 1 1/2" scope mount - 1 1/2" scope  
from any previous rings, 1 1/2" mount A55246

Scope set on 6 3/4 X, has medium (prob.) crosshair

Q2 in Box Q1, for 203 Win Browning "Safari" rifle (1967 22" barrel)

rifle SN 474425 (not 444715 or 444725)

(NR-NCIC or NSPI)

474425 (not 444725)

(Atlas (Simon & Schuster) admin 5 at end is yrd. 2 in 1/2 in)

No alum. or screws scratched or damaged of gun

No paint, wood or other foreign material on gun.

Binoocular 7x35

D.P. Bushnell Bldg, 639

Bushnell Bldg

Pasadena, Calif. 91107

NR-NCIC 4/5

(Not listed as party in NSPI)

Q64 MC - e bullet

- NC - Q2 rifle - unexp mks of Vol  
due to metal

Blood and body tissue

Wt 70.38

Orig 150gr R-P

Four mks on base portion

# L46 6

Dir Right

Land width .040  $\pm$  .002

Groove width .115

Dia .308 - .3087 - .30 cal.

Length - Metal

Rifling -

Savage <sup>300f</sup> Model <sup>219</sup> 110 <sup>30-30</sup> ; <sup>30-30</sup> M 325, 325A, 325B, 325C ; Saw 300 2m 99, 110, 110C

Remington <sup>30-06</sup> Models 721, 725, 740, 760

Saw 300 Win Mag, M110

Saw 300 Saw 89

Rem <sup>308</sup> M 722, 760, 600 ; 300 Weatherly Mag.

Q64 like bullets in Q4-Q8 & ed be ply Q3 + Q5 Q64

Q64 diff from bullets in Q9-12 (military ball)

1st same bullet looked into <sup>30 06</sup> <sup>300 Saw</sup>

" " sold for reloading - .30 cal



Bullets

Powder

Q4

wt = 150.75 gm

wt = 50.50 gm

Q5

wt = 148.95 gm

wt = 50.85 gm

Q6

wt = 149.45 gm

wt = 50.90 gm

Q7

wt = 150.25 gm

wt = 50.70 gm

Q8

wt = 149.70 gm

wt = 50.82 gm

Var 1.80 gm

.4 gm Var.

Q9

wt = 151.44 gm

wt = 49.10 gm

Q10

wt = 151.10 gm

wt = 49.50 gm

Q11

wt = 151.50 gm

wt = 49.70 gm

Q12

wt = 150.31 gm

wt = 49.44 gm

(Var 1.13 gm) ↑

.6 gm Var.

Q3 30-06 Spfd R-P cartridge case

HL side Q3 R

Ident Q2 gun

No mks other than exit mks from Q2 and Brte-Fluores  
dye - Some mks under rim apparently by mfg loading  
tools since <sup>in type</sup> mks on Q4-Q8 and Q9-Q12 and  
on ctgs in 3 boxes this type ammo in the supply instab.

Q3 like ctg case portions of Q4-Q8

Q3 and Q34 can be from same ctg - no mks for id. etc.

Q3 has 1 exit mks - HL Q2

Q3 has mfg shell holder or machine mks - loading op.

Q3 has chamber mks - HL Q2

Q3 has no other mks value

Wagon 1000 700 700

Personnel Supp. Co.

arranged for Q2

13'

Not fired; discarded

Sold Case

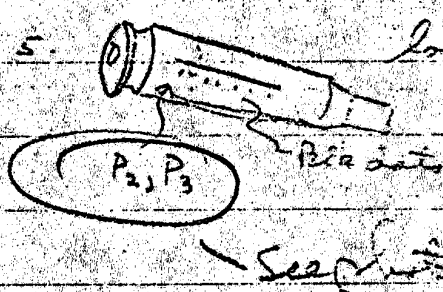
Q<sub>3</sub> Part case.

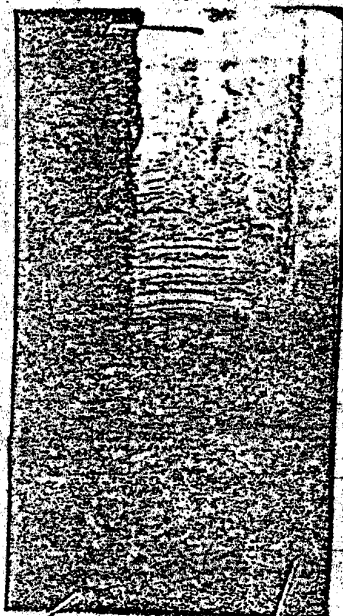
1. Wheel Q<sub>3</sub> R.

2. Black marks show areas ident. w/ Q<sub>2</sub> except BF.

3. Areas under rim - NS for ext. - / Q<sub>2</sub> extractor is "lane, loc-type"

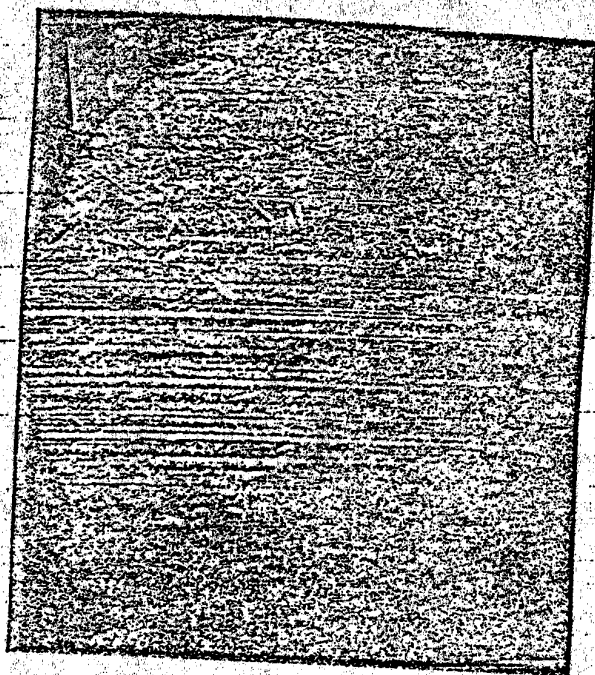
4. Rim shows only 1 extractor mark. See photo P<sub>1</sub>

5.  long scratch ident w/ Q<sub>2</sub> no photo



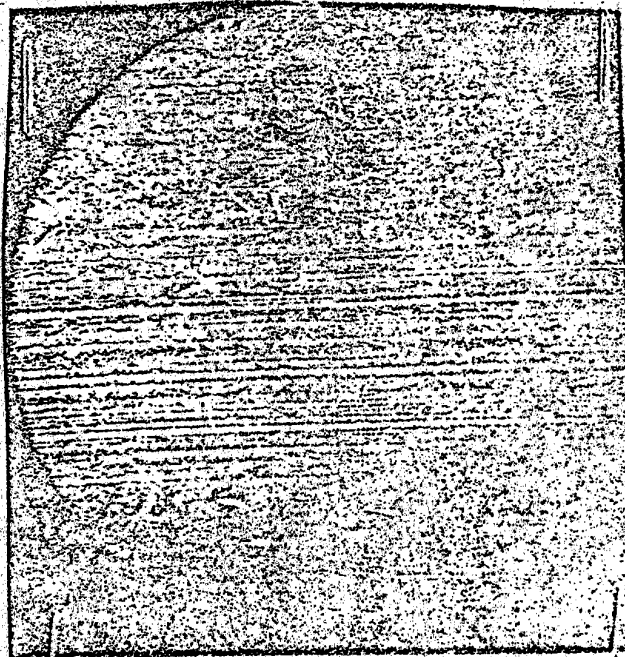
P<sub>1</sub>  
48 mm

Q<sub>3</sub> Q<sub>2</sub>



Q<sub>3</sub> Q<sub>2</sub>

P<sub>2</sub>  
48 mm



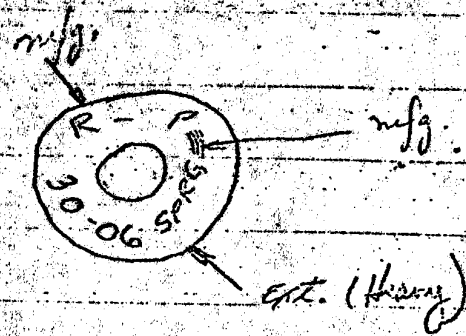
Q<sub>3</sub>

Q<sub>2</sub>

P<sub>3</sub>  
48 mm

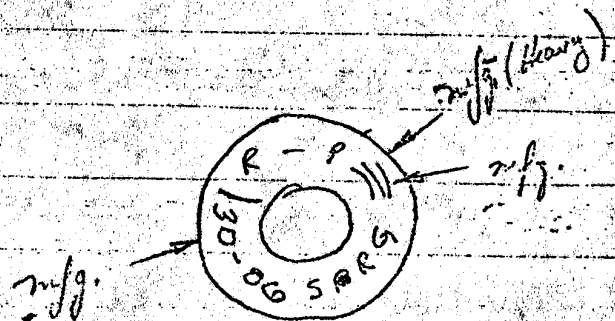


Q4

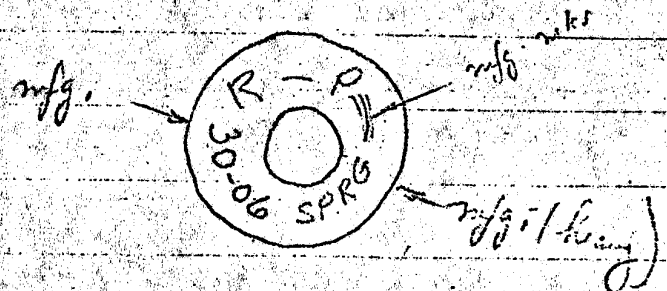


placed into shell holders in lab.

Q5



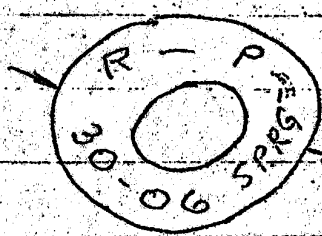
Q6





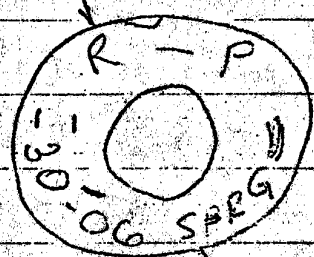
Q7

(faint light)  
r/f.



heavy  
mfg.

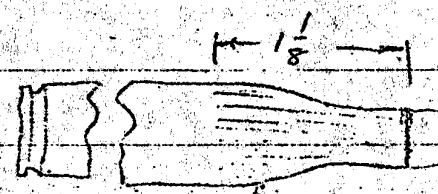
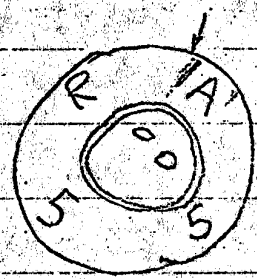
Q8



heavy mfg.

Q9

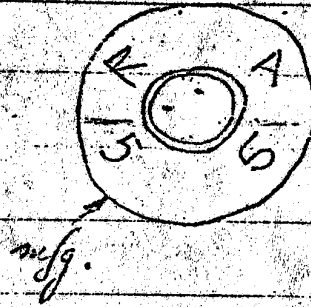
purple H<sub>2</sub>O marking



heavy outer  
maximum gun b. li

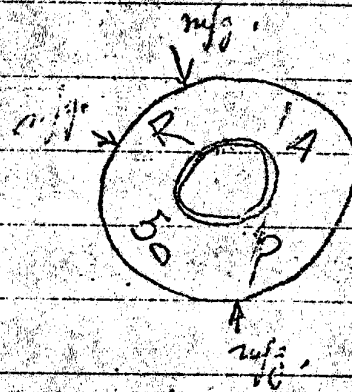
Q10

purple H<sub>2</sub>O proofing  
similar link marks as Q9



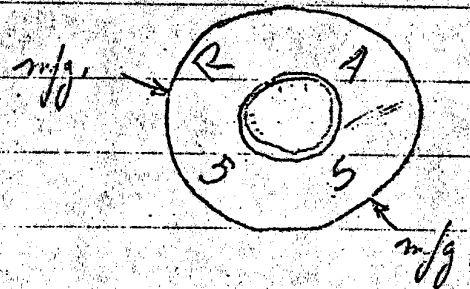
Q11

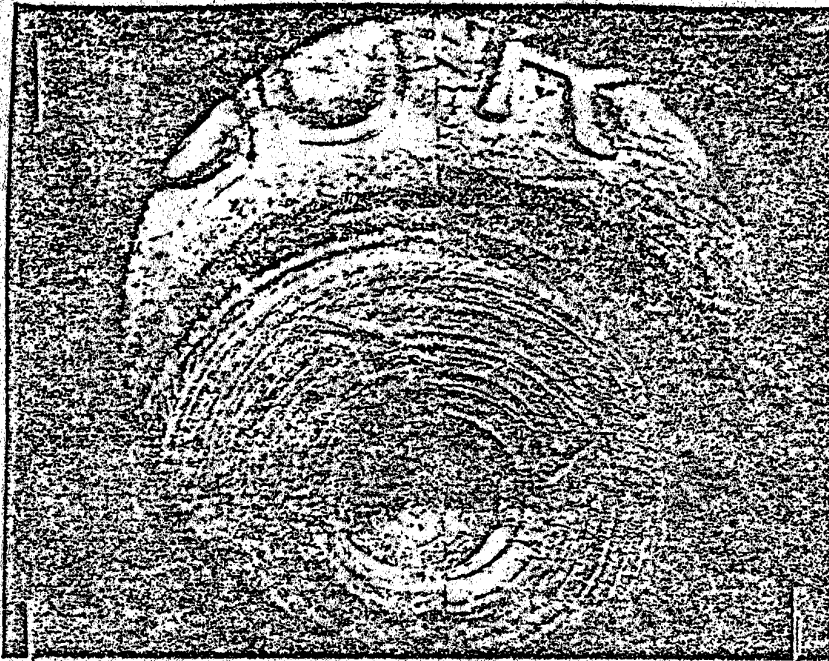
purple H<sub>2</sub>O proofing  
similar link marks as Q9



Q12

purple H<sub>2</sub>O proofing  
similar link marks as Q9



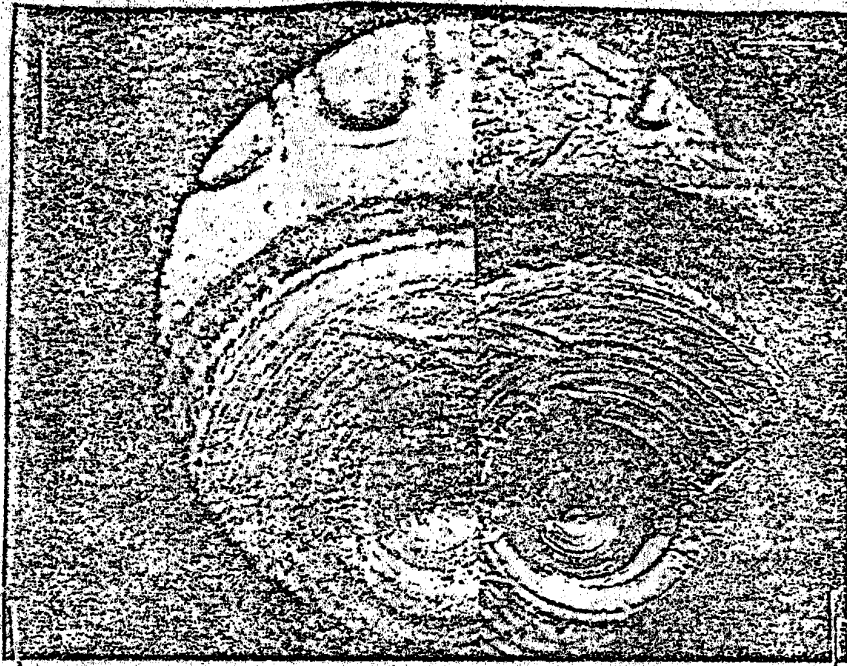


Firing Pin - NG  
for comp. purposes

Q3 48mm Q2



Q3 48mm Q2



Q<sub>3</sub> 48mm Q<sub>2</sub>



Q<sub>3</sub> 32mm Q<sub>2</sub>

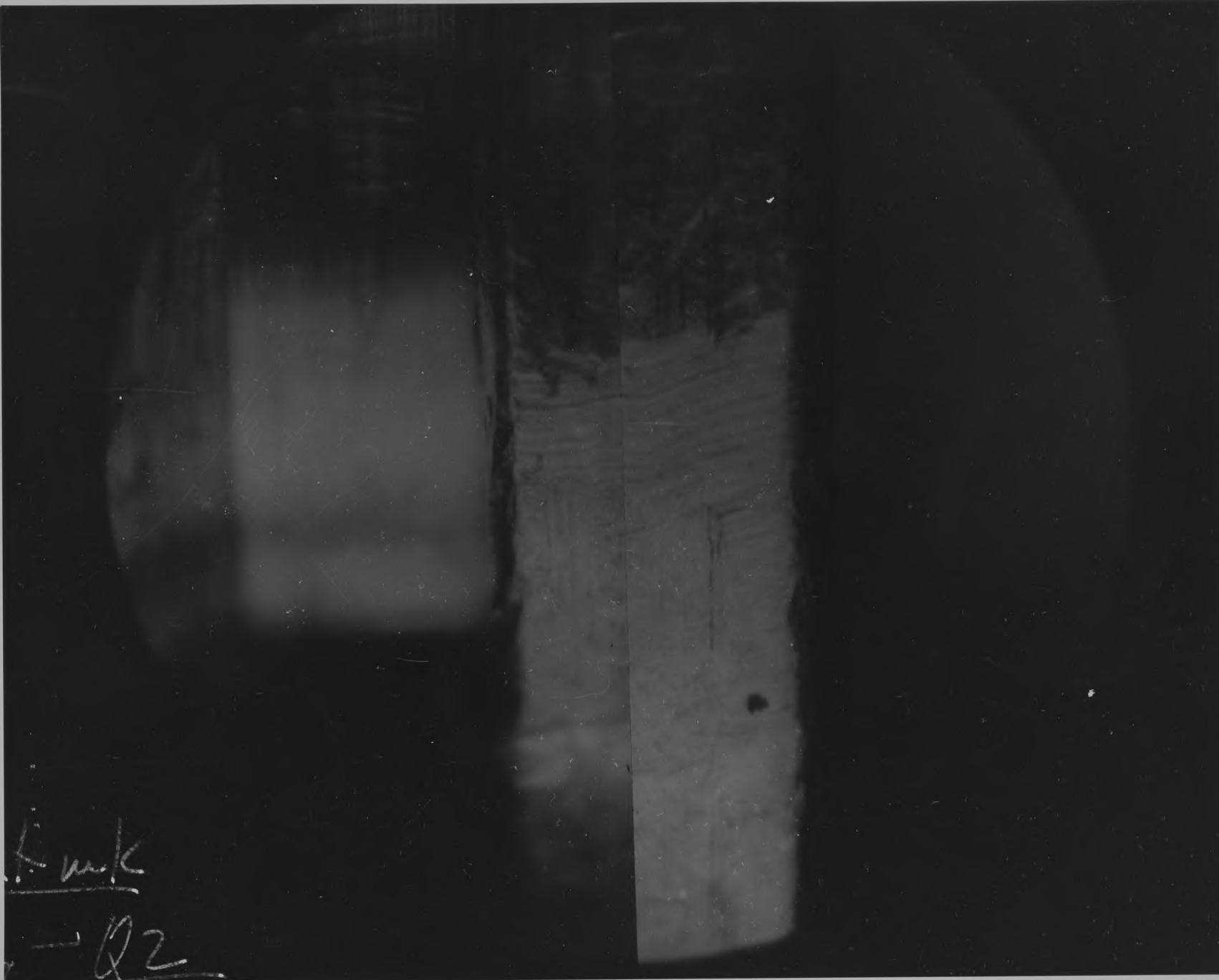


Gen. Notes: Q1. Ident by as from Coronavirine supply

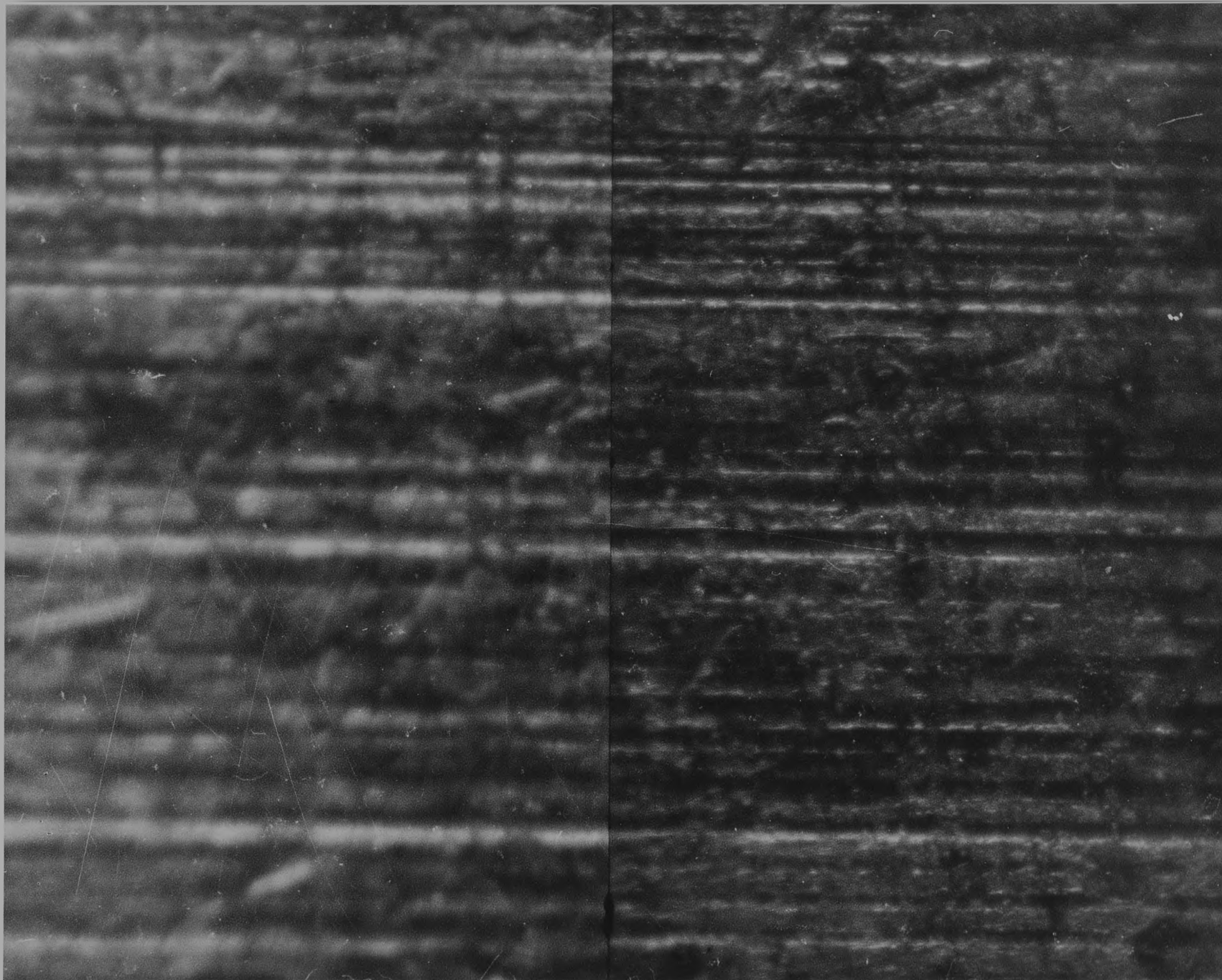
Q4-Q8 44 mil clogs Q9-12 in Peters clog box for  
150 gr PSP bullets (like 064)



44-38861-6004x



Funk  
- Q2



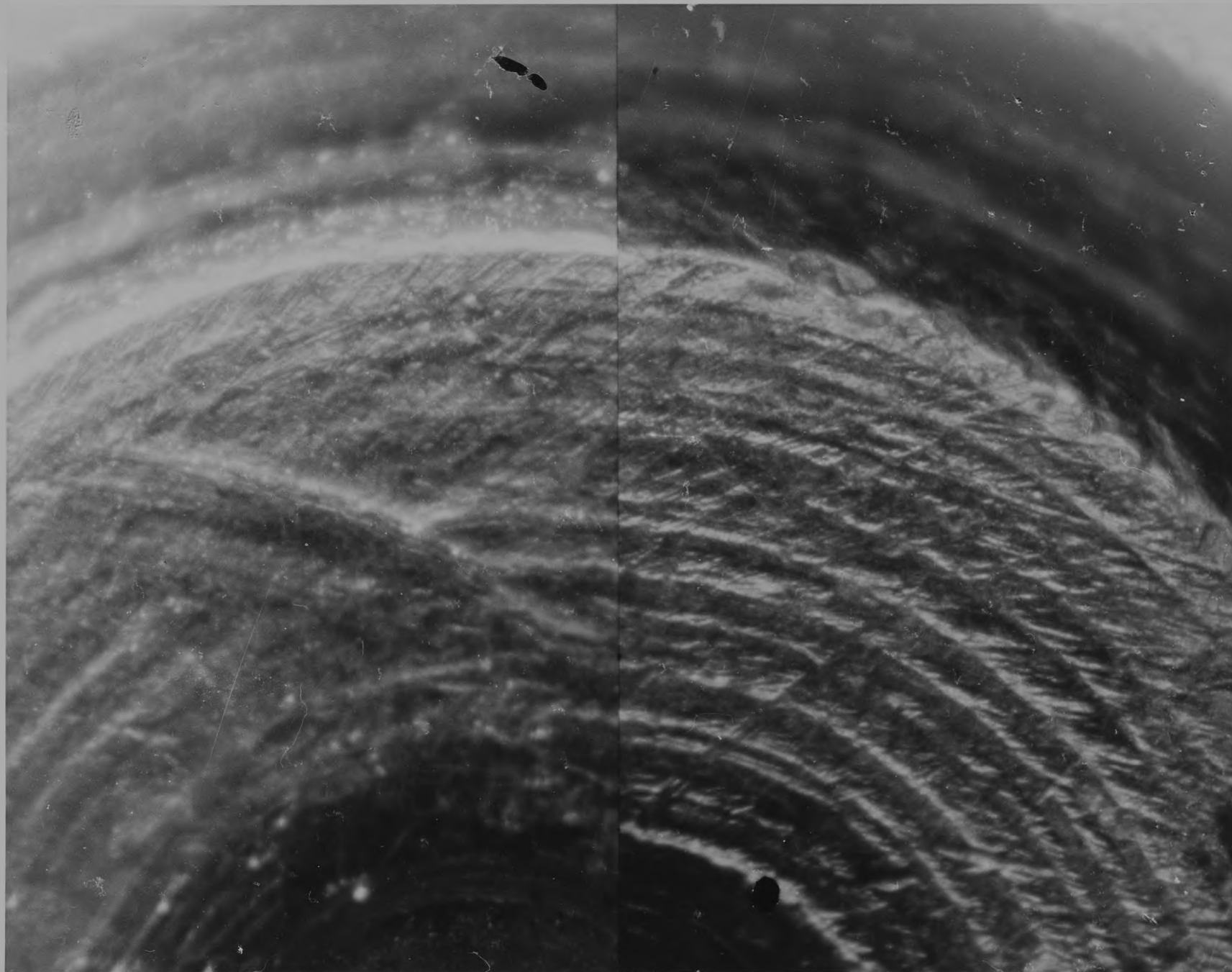
2025 RELEASE UNDER E.O. 14176



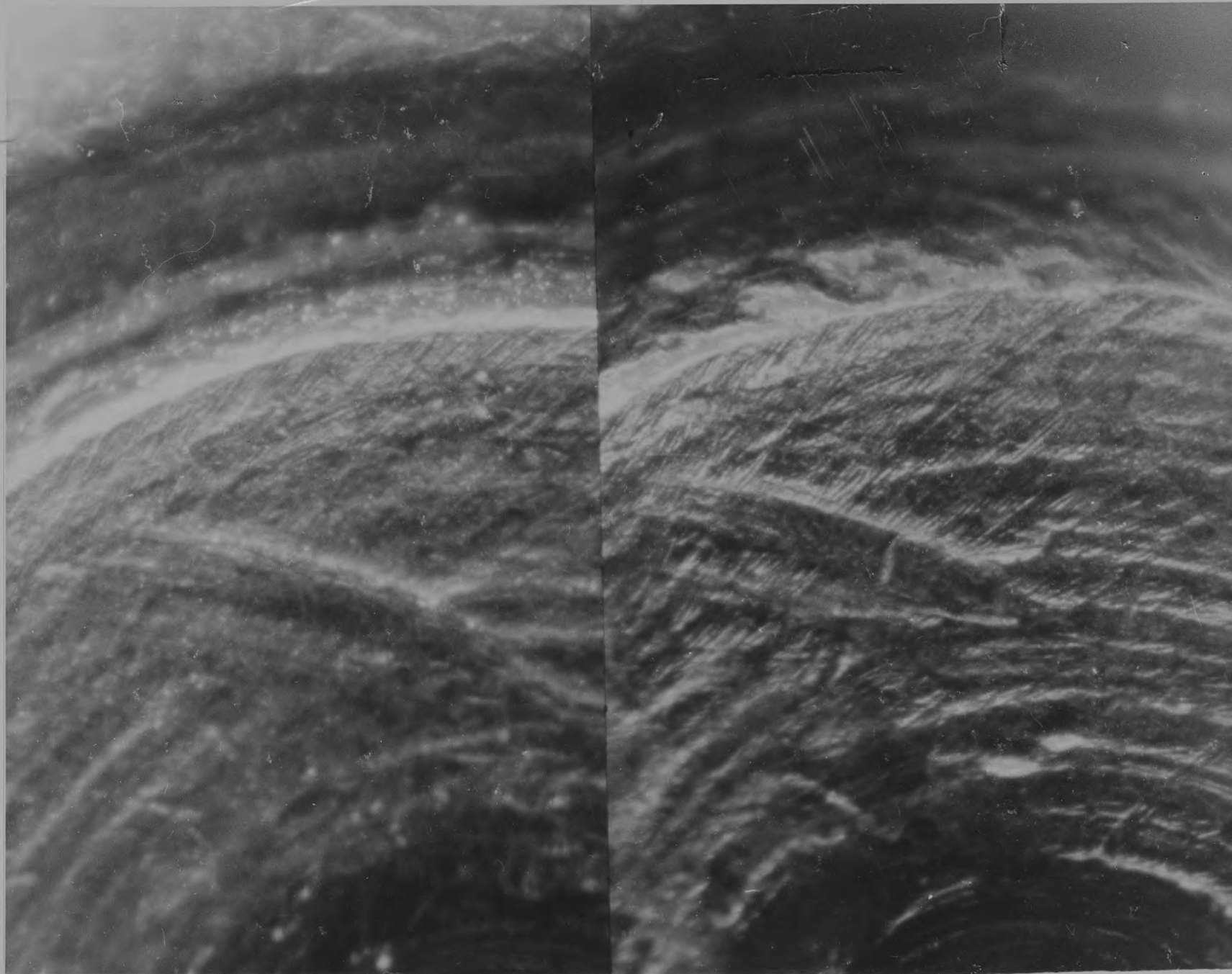
2025 RELEASE UNDER E.O. 14176

HQ  
E6004X  
EBP

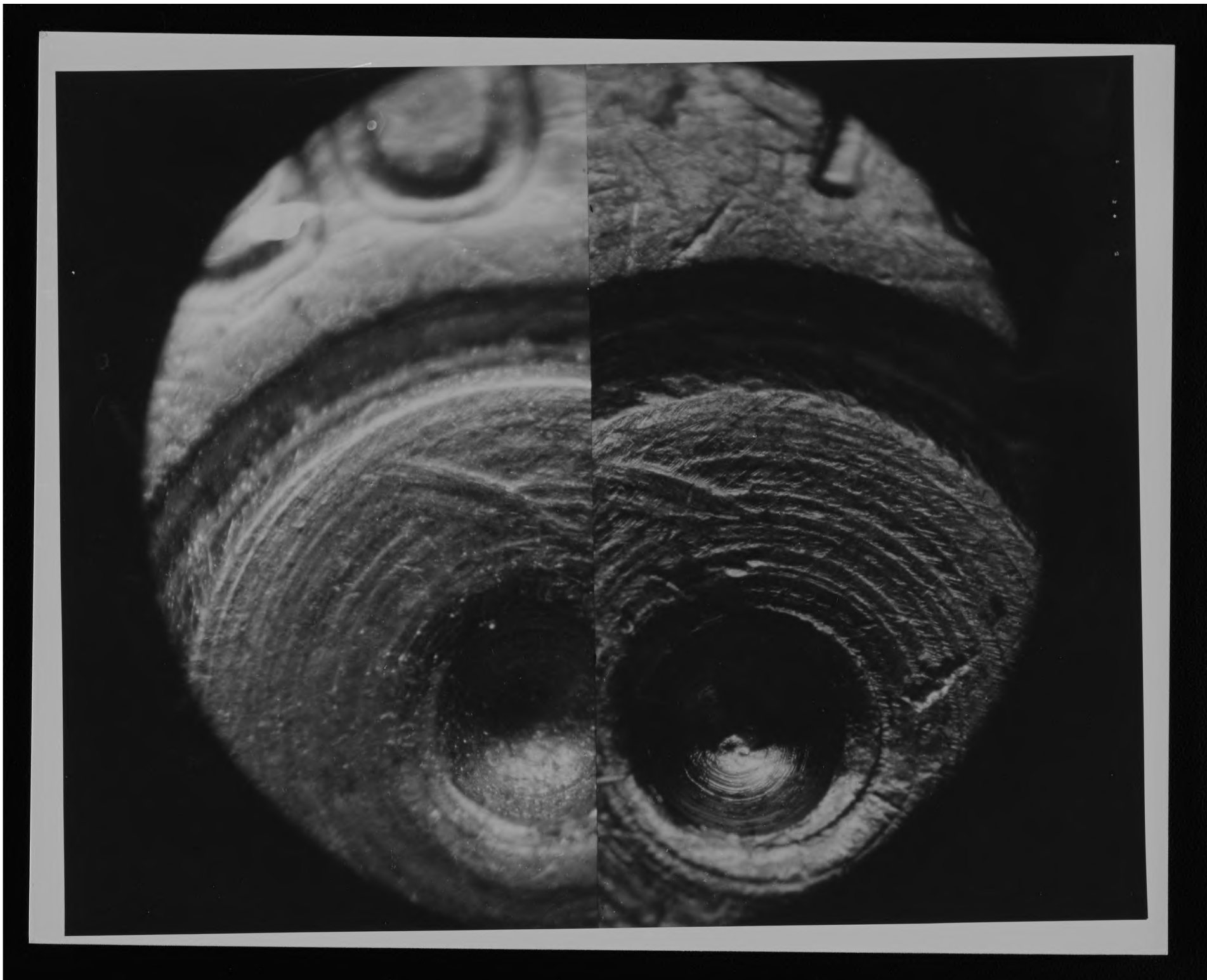




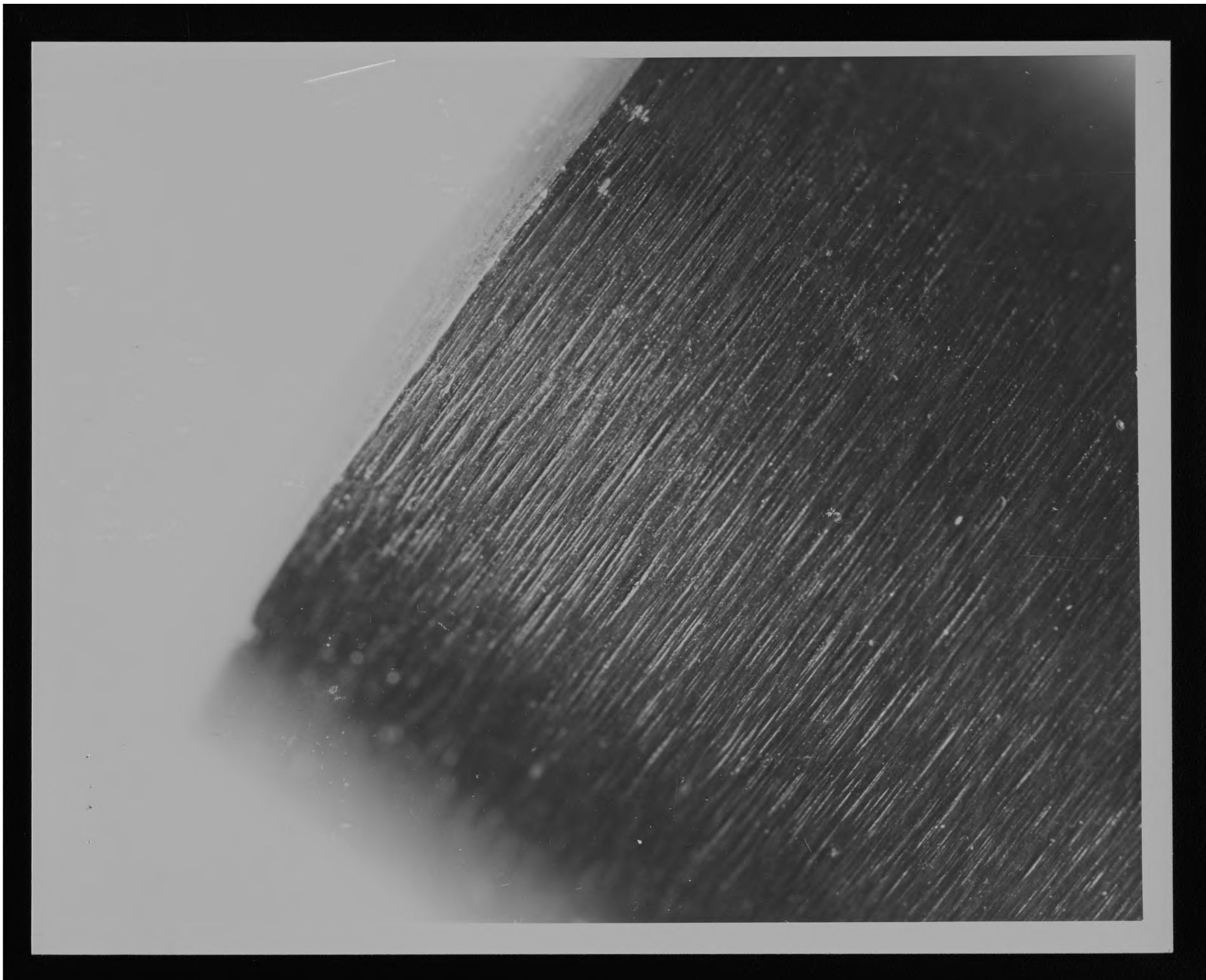
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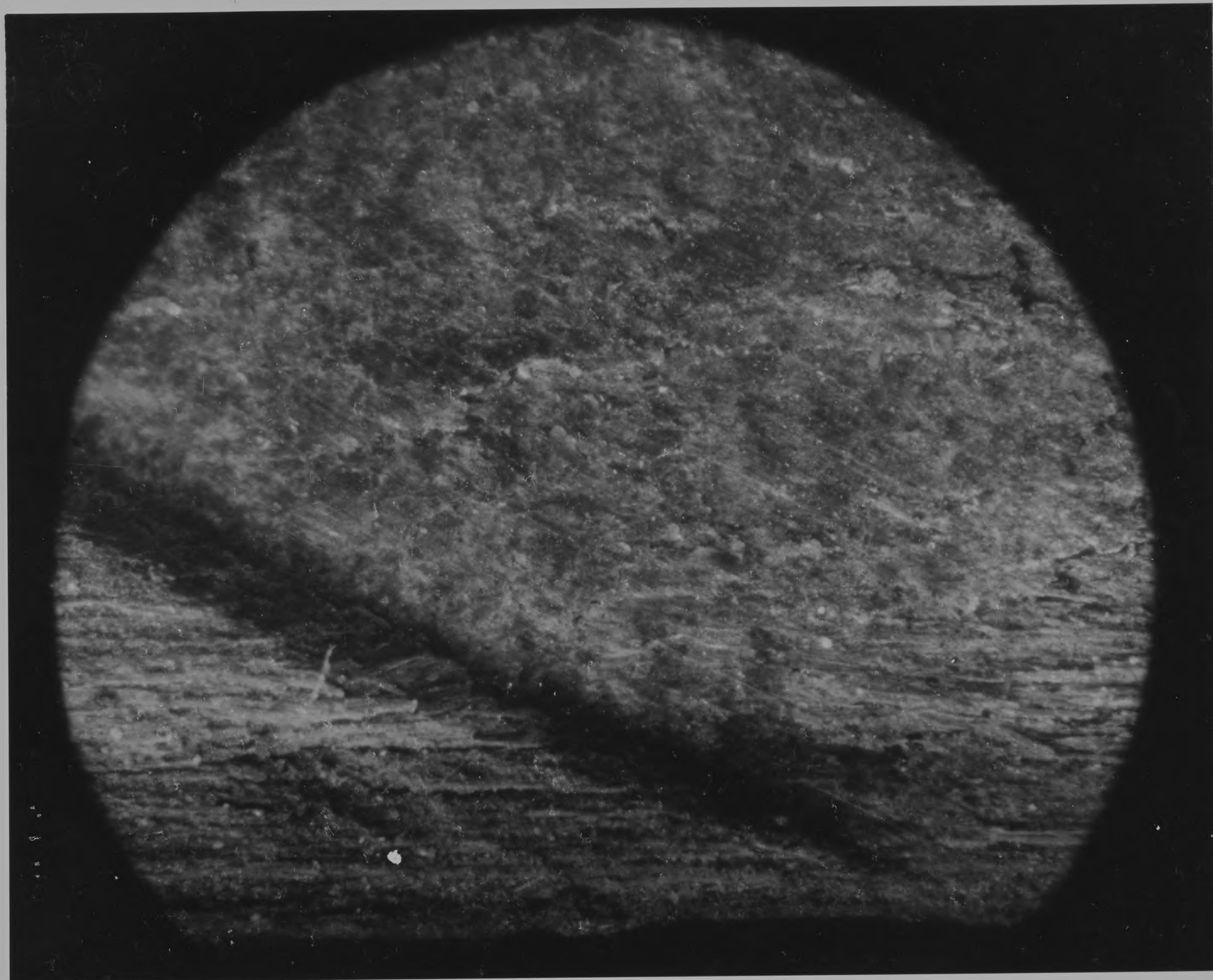


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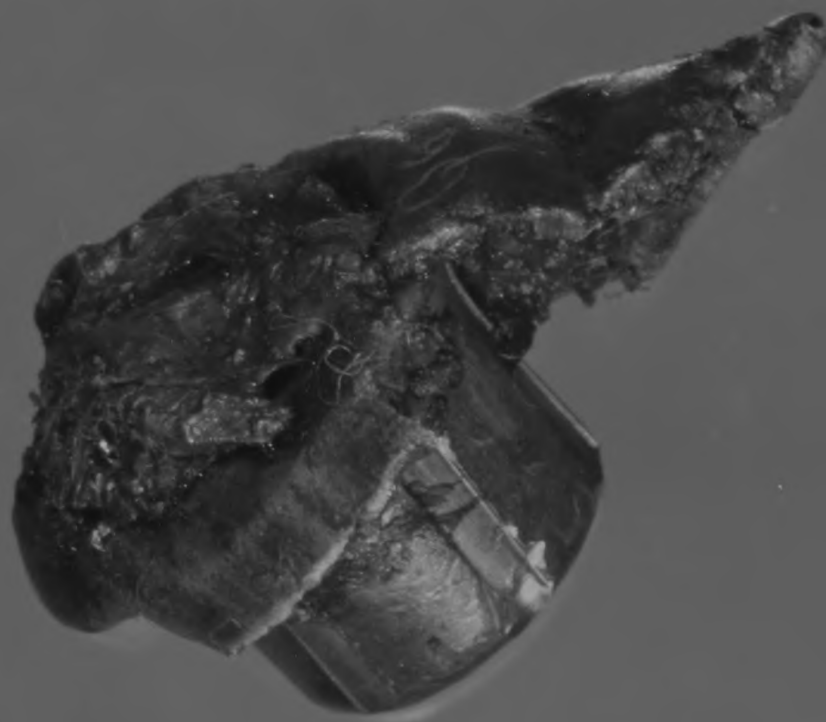
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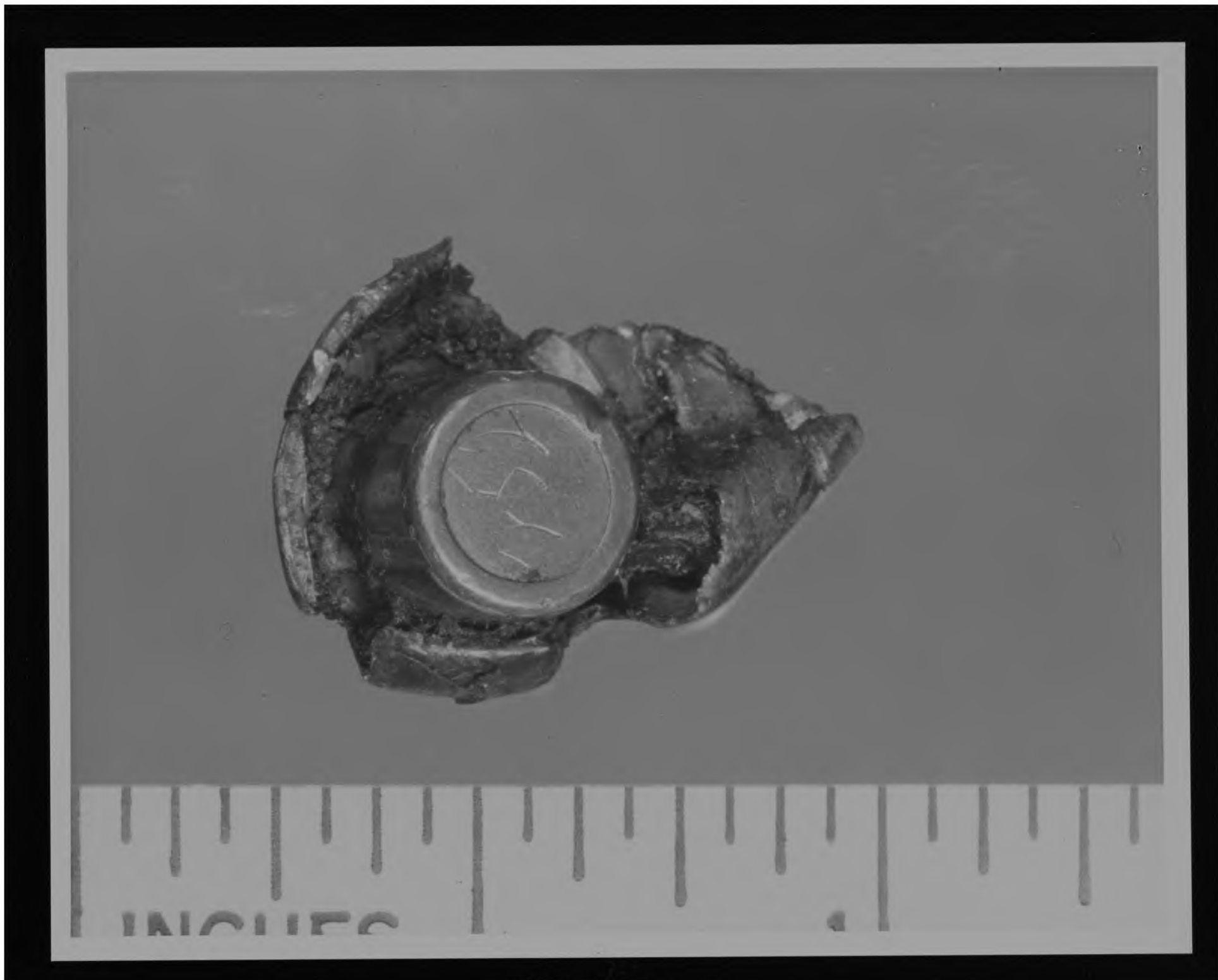


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