NOTICE

**CERTAIN DATA
CONTAINED IN THIS
DOCUMENT MAY BE
DIFFICULT TO READ
IN MICROFICHE
PRODUCTS.**

UNCLASSIFIED

HW--26140

DE92 007666

- #1. PH Reinker
- #2. GE McCullough
- #3. WR Lewis
- #4. JA Ayres
- #5. WL Schalliol
- #6. MW Carbon
- #7. RL Dickeman
- #8. AC Callen
- #9. AA Ames
- #10. WT Kattner - Fernald
- #11. WT Kattner - Hanford
- #12. HL Henry
- #13. AB Carson
- #14. EA Eschbach
- #15. HL Mars
- #16. JJ Cadwell
- #17. M Lewis
- #18. 300 File
- #19. 700 File
- #20. Yellow Copy

CLASSIFICATION CANCELLED
OR CHANGED TO UNCLASSIFIED
BY AUTHORITY OF *Doc, 1973*
A. H. Barber (PNA) 2/81
BY *Yarnite J. Davis* DATE *2-10-1992*
Heber Allen 2-12-92

November 6, 1952

This document consists of
3 pages.

P. H. Reinker, Head
Pile Engineering Sub-Unit
Pile Technology Unit

EISENHOWER SLUGS

In accordance with your request for three different types of component assemblies of the Eisenhower material into slugs, the following dimensions can apply. The quantities of slugs are suggested to give a net of around 100 each and so that a small amount of rod may be left over for future experiments.

1. For testing of cans with thin bottoms and thin caps, but with thick walls. These slugs are to be canned in cut-off regular eight-inch, thick walled, slug cans, using regular four-inch sleeves.

1.75% U²³⁵ or 2.5 enrichment factor

MASTER

DISTRIBUTION RESTRICTED TO U.S. ONLY

UNCLASSIFIED

UNCLASSIFIED

HW-26140

P. H. Reinker

-2-

November 6, 1952

Eisenhower Metal	<u>Heat Treated in Slug Form</u>	<u>Heat Treated in Rod Form</u>
Quantity	120	120
Machining diameter	1.330 $\pm .001$ 1.336 $\pm .002$	1.336 $\pm .001$ 1.336 $\pm .002$
Heat treated diameter	approx. 1.336	1.336
Machining length	4.045 $\pm .010$	4.020 $\pm .010$
Heat treated length	approx. 4.020	4.020

These canned pieces will have walls of about .050 inch, bottoms of .175 to .245 inch, caps of about .175 inch of combined aluminum-silicon and aluminum.

2. For testing of cans with thin walls, but with thick bottoms and thick caps. These slugs are to be canned in cut-off old style eight-inch thin walled cans, using regular four-inch sleeves:

Eisenhower Metal	<u>Heat Treated in Slug Form</u>	<u>Heat Treated in Rod Form</u>
Quantity	120	120
Machining diameter	1.350 $\pm .001$ 1.356 $\pm .002$	1.356 $\pm .001$ 1.356 $\pm .002$
Heat treated diameter	approx. 1.356	1.356
Machining length	3.870 $\pm .01$	3.845 $\pm .01$
Heat treated length	approx. 3.845	3.845

These canned pieces will have walls of about .04 inch, bottoms of about .350 to .420 inch, caps about .350 inch of combined aluminum-silicon and aluminum.

3. For testing of cans with thick walls and thick bottoms and tops. These slugs are to be canned in the tru-line cans now on order and due about next March, possibly earlier.

Eisenhower Metal	<u>Heat Treated in Slug Form</u>	<u>Heat Treated in Rod Form</u>
Quantity	120	120
Machining diameter	1.330 $\pm .001$ 1.336 $\pm .002$	1.336 $\pm .001$ 1.336 $\pm .002$
Heat treated diameter	approx. 1.336	1.336
Machining length	8.325 $\pm .01$	8.275 $\pm .001$ 8.275 $\pm .002$
Heat treated length	approx. 8.275	8.275

These canned pieces will have walls of about .05 inch, bottoms of about .300 to .370 inch, caps about .350 inch of combined aluminum-silicon and aluminum.

This is a total of 240 four-inch slugs, and 120 eight-inch slugs or the equivalent of 480 four-inch slugs. Any rod left over should be shipped to Hanford in rod form.

UNCLASSIFIED

UNCLASSIFIED

HW-26140

P. H. Reinker

-3-

November 6, 1952

I presume you will want W. T. Kattner, our Hanford works Fernald representative to handle negotiations with Fernald regarding the Eisenhower material.

A. A. Ames of our Present Canning group will be responsible for the canning of the slugs in the 300 Area.

Herb Mars

Assistant Head - Pile Fuels
PILE TECHNOLOGY UNIT
ENGINEERING DEPARTMENT

HL Mars/bam

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

UNCLASSIFIED

END

DATE
FILMED

3 12 7 192

I