NOTICE

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

DE91 001381

RECEIVED

JUN 15 1956

**300 AREA
CLASSIFIED FILES**

TO: File

FROM: H. C. Smith

Classification Cancelled (Change to)

*Declassified*By Authority of *RL0-C6-4**VE Lyden 10-11-90**B. Cleverly 10/18/90**DE 10-11-90*

W Botaford
 FT Baker
 # 3 - EJ Filip
 # 4 - RG Clough
 # 5 - DS Lewis
 # 6 - EP Lee - JH Warren
 # 7 - JE Walder - 700 File
 # 8 - H Mars
 # 9 - FG Tabb - PC Jordan
 # 10 - VW Windsheimer - JA Haaga
 # 11 - GE McCullough - 300 File
 # 12 - Pink Copy
 # 13 - Yellow Copy

August 1, 1951

RECORDS

This Document consists of

2 Pages N

REMOVAL OF RUPTURED HEAVY METAL SLUG**FROM TUBE NO. 1874-F****Summary**

The F pile was shut down at 8:43 a.m. on July 28, 1951 to permit the removal of a ruptured slug from tube 1874-F. The removal was accomplished by means of the charging machine using normal forces. The total time expended in the actual removal operation was 2.1 hours. The total outage extended 27.3 hours because of minimum pile down time requirements. During the remainder of the outage, scheduled pile maintenance was carried out.

Detection

The rupture was initially detected by the effluent water monitoring system. The initial indications were confirmed by counts in a portable survey instrument taken on samples from the suspect header and adjacent headers. A reading of greater than 5 r/hr was obtained on the rear pigtail of tube No. 1874-F.

Removal

The ruptured slug was discharged by means of the pneumatic charging machine, with normal forces required.

Data On The Charge

Tube 1874-F contained regular metal charged October 24, 1950. The ruptured slug was an MR type, canned October 5, 1950, processed on truck No. 10, line H, and had been autoclaved. The charge had reached 77% of current goal concentration and the tube had been operating at a power of 289 KW. By monitoring the pieces from the tube, it was determined that the ruptured piece was in either the 15th or 49th position from the upstream end of the charge.

The end cap was completely separated from the rest of the slug. The cap end of the slug was split longitudinally for approximately $\frac{1}{2}$ inch. The base of the slug also appeared to be cracked around the circumference of the can, but remained in place.

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

DECLASSIFIED

Due to film deterioration,
 portions of this document
 may be illegible.

10-90

HI Aspects

There was no overexposure of personnel, and contamination was confined to established danger zones.

Approximately twenty minutes after isolation of the tube, the effluent flow was diverted from the west to the east 107-F basin. The west basin was pumped to the crib. Subsequent samples from the basin permitted the basin to be returned to normal use on August 1, 1951. Water flow through the storage basin was stopped until samples were obtained after the plug had been canned. The basin was released for normal use on July 30, 1951.

Slug Disposal

The ruptured slug is currently being held in the 105-F storage basin awaiting transfer to 111-B.

H. C. Smith
H. C. Smith
P DIVISION

DEL:MS:jm

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.

DECLASSIFIED

END

DATE FILMED

11 / 07 / 90