SEALED SOURCE FILES

AUG 20 1963

L&R:IB:JMB

F & M Scientific Corporation
Starr Road and Route 41
Avondale, Pennsylvania

Attention: Mr. J. Peters

Gentlemen:

Reference is made to your letter dated July 30, 1963, requesting that certain F & M Corporation drawings be withheld from inspection by the public.

A finding has been made that inspection of the drawings by the public would adversely affect the interests of the F & M Corporation by granting competitors access to construction details of the equipment distributed therein. Further, it has been determined that inspection of the drawings by the public is not required in the public interest.

Accordingly, you are hereby advised that the drawings referenced in your letter of July 30, 1963, signed by Mr. J. Peters, will be withheld from inspection by the public pursuant to Paragraph 2.810(b) of the Commission's "Rules of Practice," 10 CFR 2. Withholding from inspection by the public shall not, however, affect the right, if any, of persons properly and directly concerned to inspect the documents.

Very truly yours,

Eber R. Price
Assistant Director
Division of Licensing
and Regulation

bcc: Compliance, Region I

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PDR RC *
SSD PDR

L&R:IB	L&R:IB	L&R:ML	OGC	L&R
JMBell:bjb	RECunningham	LJohnson		erPrice
8/ /63				

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OFFICE VISIT
F & M SCIENTIFIC CORP.
AUGUST 15, 1963

Messrs. James Peters and John Smit called to discuss F & M's gas chromatography devices and furnish additional information necessary to licensing of their customers for use of up to 200 millicuries of Hydrogen 3.

A curve of tritium loss versus temperature was presented to supplement a similar curve submitted with their original proposal describing their detector cells. However, the other item of additional information which we had requested by telephone was not furnished. Mr. Peters stated that they would send us this information in the form of a verbal description of the outer cabinetry used to protect and secure the detector cells.

It was stated by Messrs. Peters and Smit that their latest curve was based on the use of both "old" foils and new foils that they had obtained from a foil that had been in use several months, that all foils were of the ~~normal~~ nominal 1 curie per square inch type and that the gases used were directly from the container. Although the gases were not dry prior to their use, it was not known what amount of moisture was contained in the gases.

Messrs. Peters and Smit also demonstrated their two cells and heat sink.

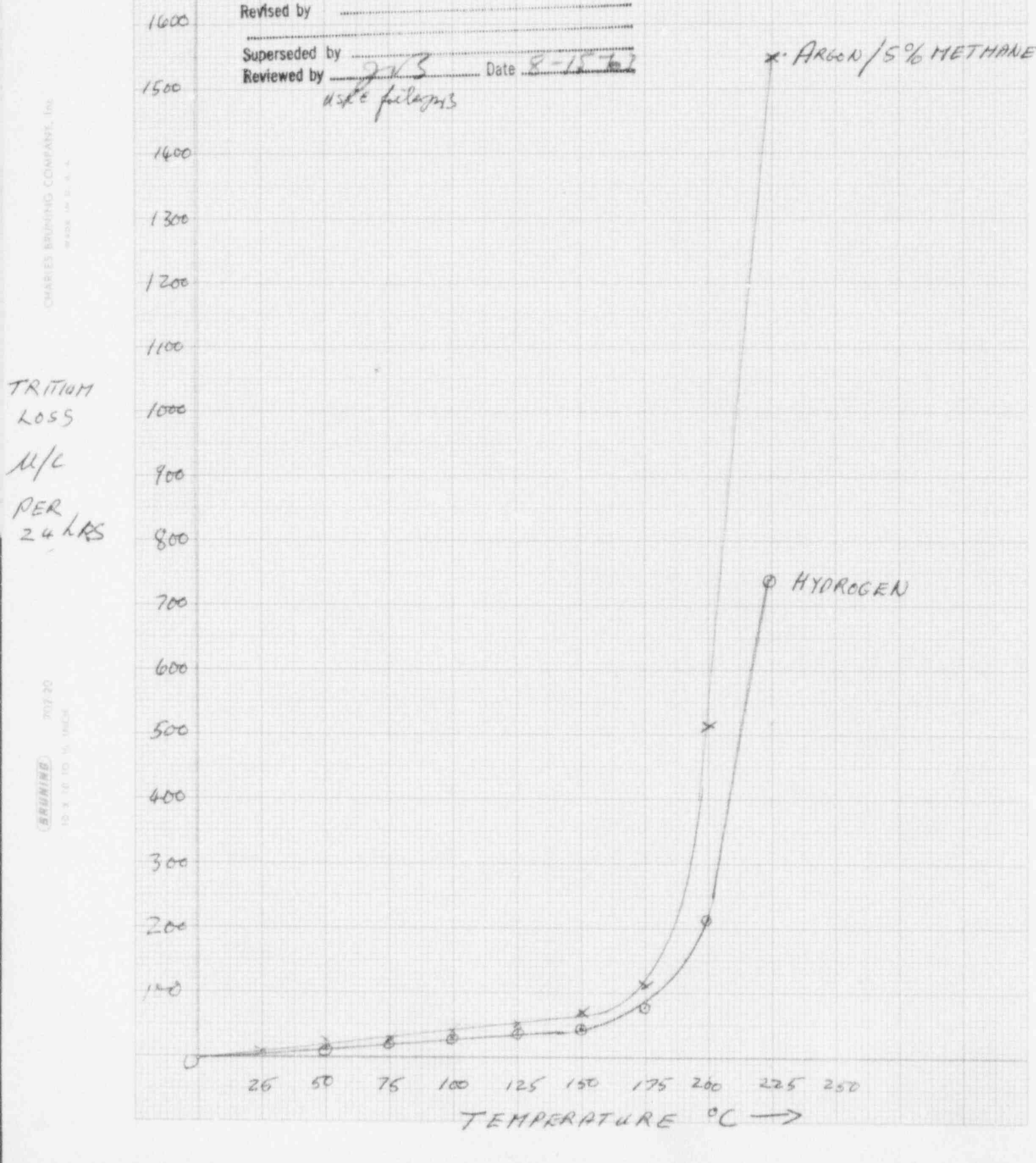
Jack M. Bell

F+M SCIENTIFIC CORP.

TRITIUM LOSS PER 24 HRS / TEMP. FOR 200MC H_3 STAINLESS STEEL FOILS.

SEALED SOURCE FILES

Date received 8-15-63 (office visit)
Revised by
Superseded by
Reviewed by JVB Date 8-15-63
USAEC files



Micro Curies/24 Hrs. Loss for 200 M. C. Tritium Foil

	ARGON/METHANE			HYDROGEN		
TEMP.	Run 1	Run 2	Run 3*	Run 1	Run 2	Run 3*
25	15	13	10	12	14	10
50	25	27	14	20	22	14
75	31	33	25	25	26	26
100	43	45	35	31	32	37
125	52	57	45	38	41	37
150	65	65	60	50	52	48
175	110	100	95	85	88	75
200	520	510	485	260	265	215
225	1550	1570	1570	760	750	740

* New foil used.

SEALED SOURCE FILES

Date received 8-15-23 (at the visit)
Revised by
Superseded by
Reviewed by JXJ Date 8-15-23

Sealed Source Files

TELEPHONE CALL FROM J. PETERS
F & N SCIENTIFIC CORPORATION
JULY 25, 1963

Mr. Peters called to request clarification of some items of our letter of July 23, 1963, which he received subsequent to his call of July 25. His primary concern was with Item 6 of our letter in that he does not feel that it is possible for him to furnish model numbers for each different gas chromotography device that may be marketed by F & M. He was requested to give us the basic model number to which letters or numbers may be added for modification. He stated that there were a whole series of model numbers all completely unrelated. He was informed that in view of this it would be acceptable if he would merely describe the basic device in general terms specifying the security offered the detector cell by the device cabinet.

Mr. Peters wished to know if labeling of the detector cell, which will be contained within the device cabinet, will be sufficient to meet our requirements. He was informed that we feel that the outer cabinet of the device should bear a warning indicating the presence of radioactive material in addition to the 20.203(f)(1) and (f)(4) label on the cell itself.

Mr. Peters was asked about the water content of the nitrogen gas used in the desorption test on the Tritium foil which he had described to us. He stated that the nitrogen gas was dry. He was also asked what gases in general would be used as carrier gases. He stated that argon was the most popular, next the argon-methane mixture followed by nitrogen; and that in the case of one cell, hydrogen is the only gas used. It was pointed out to him that in view of the possible greater loss of Tritium from the foil due to exchange with the carrier gas when hydrogen is used we would like to have a test run on the foils he will be using showing desorption of the Tritium as hydrogen gas is passed over the foil. This he agreed to do.

Mr. John ~~Smith~~ Schmit, F & M's RSO, stated that they had attempted to obtain test information from the foil supplier without success.

Mr. Peters indicated that he will probably visit us in the near future, following his reply to our letter of July 23, to present additional foil test data and allow us to inspect prototype models of their detector cells.

Mr. Peters indicated that F & M will request withholding, from the public, drawings of their detector cells.

Sealed Source Files