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We have reviewed the subject application requesting modified procedures for drying highly enriched UF_6 in the drying oven, and the addition of a new filter for UF_6 .

We see no objection to approval of the additional layer of UF_6 in the drying oven.

With regard to the new filter, it is of safe diameter and we agree that its location fulfills the solid angle criterion insofar as the other four pieces of equipment are concerned (see Figure 3 attached to July 23 application). However, we are unable to confirm the solid angle of 2.5 steradians, calculated at the new filter, and the solid angle subtended at a muffle box in the aisle outside of the hood. Please ask United Nuclear to furnish dimensioned sketches and a summary of the calculations for these two cases.

Attachment:
Docket 70-36, 1 & 3 of 5

DLR:MS:CEB

CDLake/vj

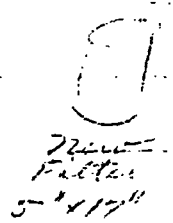
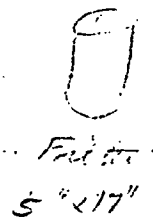
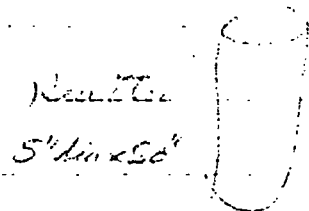
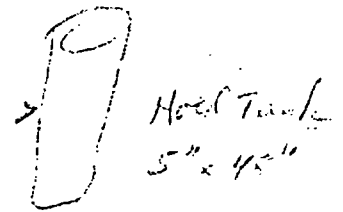
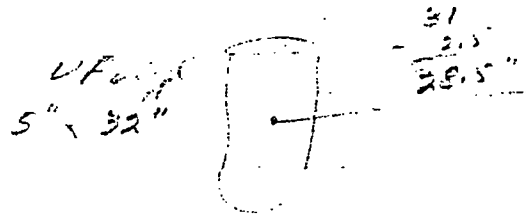
11/1/62

B-110

File: 73-36

Appli: (7/3/62)

... Note: Sketch given 17" dia.
Add a new 5" dia x 12" VF₄ filter

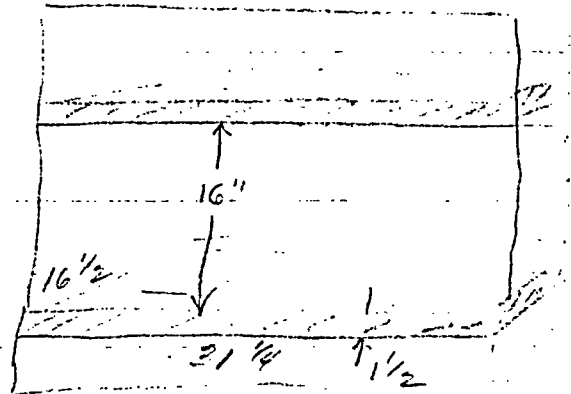


Drying Oven - Dry VF₄ in two layers rather than one

Safe slab thk, opt mod is 1.5"

Green part will be wet but not opt

Brgh. Check 1019 (Very Conservative)



$$N = \frac{\text{Area}}{A^2} = \frac{16.5 \times 31.25}{16^2} = 2.01 \text{ slabs. UN gets 1.3 slabs.}$$

Note: K-1019(S) gives 12" spacing OK for two inf 1 1/2" slabs
i.e. Green is OK.

A

2.0"

43.7"

1557

Feet

5" x 7 1/2"

$$\gamma_{\text{max}} = 3.2$$

570

$$n_1 = 748$$