

/PLEASE RELAY/

FRM FRANK C MEAD MONSANTO CHEMICAL CO MOUND LABORATORY MIAMISBURG OHIO
TO JANE HALL LOS ALAMOS SCIENTIFIC LABORATORY LOS ALAMOS N M

S-03 DTD 55 SEPT 132040Z GR 213

~~SECRET RESTRICTED DATA~~

PRESENT PLANS FOR IONIUM PRODUCTION ARE THAT MOUND LABORATORY IS TO
CARRY OUT THE HOT LABORATORY WORK CMA RECEIVING EXTRACTED MATERIAL
FROM MALLINCKRODT IN ST LOUIS PD AT THE PRESENT TIME CMA THE ONLY
SPECIFICATIONS WHICH WE HAVE ARE FROM ANL-4789 CMA A REPORT BY
D F PEPPARD ET AL CMA ON THE QUOTE ISOLATION OF GRAM QUANTITIES OF
IONIUM FROM MALLINCKRODT RAFFINATE PD UNQUOTE PARA THE SPECIFICATIONS
ARE IN PARAGRAPH FOUR OF PAGE SEVEN OF THE ABOVE REPORT AND ARE AS
FOLLOWS CLN

THE SPECIFICATIONS FOR ALPHA PURITY OF THE PRODUCT IONIUM ADOPTED
WAS THAT NOT MORE THAN 0.5 PER CENT OF THE ALPHA ACTIVITY OF A
FRESHLY ISOLATED PRODUCT SHOULD LIE OUTSIDE THE IONIUM ALPHA ENERGY
PEAK WHEN ANALYZED IN A 48-CHANNEL ALPHA PULSE ANALYZER PD OTHER
UPPER LIMITS CMA EXPRESSED AS PARTS PER MILLION OF IONIUM BY MASS CMA
ESTABLISHED AS PRODUCT SPECIFICATIONS WERE CLN URANIUM /50/ CMA
SCANDIUM /1,000/ CMA GADOLINIUM /100/ CMA SAMARIUM /100/ CMA AND
EUROPIUM /100/ PD

AS THE SPECIFICATIONS ARE STATED CMA A 48-CHANNEL ALPHA PULSE ANALYZER
IS NEEDED PD IS THIS NEDXXX NECESSARY QUERY

IN ORDER TO SET UP ANALYTICAL PROCEDURES WITH THE REQUIRED ACCURACY
AND PRECISION CMA IT IS NECESSARY THAT WE HAVE A STATEMENT OF THE
PRODUCT SPECIFICATIONS FROM LOS ALAMOS PD END MSG REF AEC-S-03
END OF MESSAGE

55 SEPT 13/2110Z

PLS ACK ONE TOT TNXS FLO

RECD OK TKS JR

MOUND DECLASSIFICATION REVIEW	
1ST REVIEW-DATE: 3/16/98	DETERMINATION (CIRCLE NUMBER(S))
AUTHORITY: <input type="checkbox"/> AOC <input checked="" type="checkbox"/> ADC <input type="checkbox"/> ADD	1. CLASSIFICATION RETAINED
NAME: J. M. BLANCKIN	2. CLASSIFICATION CHANGED TO
2ND REVIEW-DATE: 3/17/98	3. CONTAINS NO DOE CLASSIFIED INFO
AUTHORITY: ADR	4. COORDINATE WITH
NAME: m. aty	5. CLASSIFICATION CANCELLED
	6. CLASSIFIED INFO BRACKETED
	7. OTHER (SPECIFY)