

Results of seperation experiment T28 carried out on 1998 March - 1999 March

Fraction	Quantity	175 Lu	176 Lu	Estimated Qty of Lu 176 as ions	Estimated Qty of Neutrals
T28 Lu Tails	1.54 mg @ 92.4% (Equivalent to 1.92 mg @ 74%)	7.6	92.4	1.42	0.12

Note:

	P1	P2	P3	CG	CP	RP	RG	Tails	CA
Day1 (2020-07-23)	1.55	4.45	17.9	-1300.0	-850.0	500.0	0.0	200.0	100.0
Day2 (2024-07-26)	1.35	2.0	3.0	-1300.0	-850.0	500.0	0.0	200.0	100.0

- 1. The tail quantity is as per weight difference of tail plate before and after the experiment along with peeled-off material collected and the multiplication factors for loss thru QTM opening is taken as 1.1
- 2. Stripping Efficiency = 36.5% of addressable population of Lu-176; which itself is only ~0.52% total lutetium vapour. The calculations based on change in isotopic composition of fraction near to the natural abundance should be considered with utmost care.
- 3. The total ion collection estimated as per V-t product was 2.1 mg and the actual ion collection is 1.43 mg
- 4. Ion Accounting = 23.5%
- 5. Estimated quantity is based on results from ACD vide report no.009, dated 11-08-2000.
- 6. Isotopic composition of Lu-176 is based on its isotopic ratios with respect to Lu-175 as analysed at EmA&ID vide report dated 11-08-2000.
- 7. Equivalent quantity has been calculated as  $(x_p * P)/0.7$ ; where 'xp' is product stream concentration and 'P' is product quantity/flow rate.
- 8. Isotopic composition of natural Lutetium is as per measured feed composition.

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