

Results of seperation experiment T28 carried out on

Fraction	Quantity	175 Lu	176 Lu	Estimated Qty of Lu 176 as ions	Estimated Qty of Neutrals
T28 Lu CP	1.2 mg @ 95.2% (Equivalent to 1.54 mg @ 74%)	4.8	95.2	1.14	0.06

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 Effeciency = 36.5% of addressable population of Lu-176; which itself is only ~0.52% total lutetium vapour. The calculations based on change in isotpoic composton 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 reults from ACD vide report no., dated 28-01-2025.
6. Isotopic composton of Lu-176 is based on its isotopic ratios with respect to Lu-175 as analysed at EmA&ID vide report dated 28-01-2025.
7. Equivalent quantity has been calculated as $(xp * P)/0.7$; where 'xp' is product stream concentration and 'P' is product quantity/flow rate.
8. Isotopic composton of natural Lutetium is as per measured feed composton.

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