^{75}Se

Friedlander et al. reported the first observation of ^{75}Se in the 1947 paper "Evidence for, and Cross Section of 115 Day ^{75}Se" (1947Fr08). Selenium was irradiated in the Argonne pile and ^{75}Ar was produced by neutron capture reactions. Samples mounted on scotch tape foils were counted with a Geiger counter. "Evidence has been given to show that the 115-day activity produced in selenium by thermal neutrons is due to Se^{75} which decays by K electron capture to As^{75}, accompanied by a 0.4 Mev γ-ray." The 1944 table of isotopes (1944Se01) had listed half-lives of 48 d and 160 d which were based on a private communication and a conference abstract, respectively. In addition, a publication from the headquarters of the Manhattan project listed ^{75}Se as an available isotope with a half-life of 125 d (1946Ma02), which was based on a classified report (CC-3389).

Adapted from reference (2012Gr02)

1944Se01 G. T. Seaborg, Rev. Mod. Phys. **16**, 1 (1944).
1946Ma02 Manhattan Project Collaboration, Science **103**, 697 (1946).
1947Fr08 H. N. Friedlander, L. Seren, and S. H. Turkel, Phys. Rev. **72**, 23 (1947).
2012Gr02 J. L. Gross, J. Claes, J. Kathawa, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 75 (2012).

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