^{131}I

In 1939, Seaborg et al. from the University of California at Berkeley identified ^{131}I in "Radioactive tellurium: further production and separation of isomers" (1939Se05). Tellurium was bombarded with 8 MeV deuterons and an 8-day iodine activity was measured following chemical separation as reported in an earlier paper (1938Li11). However, it was not possible to decide if the activity was due to ^{129}I or ^{131}I. This question was resolved with the assignment of the parent activities to ^{131}Te: "The 1.2-day and 25-minute activities, which are both directly produced by deuteron bombardment of tellurium, are isomeric and isomer separation experiments show that the 25-minute period grows from the 1.2-day activity; it is in fact possible to observe, by successive extractions of iodine, the growth of the eight-day iodine from the 25-minute tellurium activity obtained by extraction from its parent isomer." The 8-day half-life had been reported earlier without a mass assignment (1939Ab05).

Adapted from reference (2013Ka01)

1938Li11 J. J. Livingood and G. T. Seaborg, Phys. Rev. **53**, 1015 (1938).

1939Ab05 P. Abelson, Phys. Rev. **55**, 670 (1939).

1939Se05 G. T. Seaborg, J. J. Livingood, and J. W. Kennedy, Phys. Rev. **55**, 794 (1939).

2013Ka01 J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"