TG-40 requires assay of at least 10% of radioactive seeds for seed implantation. A procedure is described here wherein radioactive seeds may be assayed singly or in multiples in a Well Chamber permitting more rapid assay but with no exposure to personnel. A lead glass dome is located over the Well Chamber with an extension from the dome platform to the bottom of the well. Radioactive seeds are introduced through shielded transfer from their original container into the interior of the glass dome. Using a vacuum source, the seeds are manipulated into the extension for assay. After each assay, the seed or seeds are removed by vacuum back to the original container and the process repeated with a new seed or group of seeds. Utilizing vacuum and shielded transfers, 100% of the radioactive seeds may now be assayed as rapidly as 10%, only without the hazard of personnel exposure.