

INTERNATIONAL ATOMIC ENERGY AGENCY

Dosimetry and Medical Radiation Physics Section - Division of Human Health

Vienna International Centre, P.O. Box 100, A-1400 VIENNA, AUSTRIA

Facsimile: +43 1 26007-21662, Telephone: +43 1 2600-28351 or 28331, e-mail: DOSIMETRY@IAEA.ORG

IAEA/WHO TLD POSTAL DOSE QUALITY AUDIT

Institution: *National Center of Radiobiology and Radiation Protection*

Address: *Georgi Sofijski Str, No: 3, NCRPP, Bl 7
Sofia*

Country: *Bulgaria*

TLD batch No: *DL15*

TLDs irradiated by: *Petkov*

Date of irradiation: *2015-05-18*

Evaluation: *2015-08-07*

RESULTS OF TLD MEASUREMENTS FOR Co-60 AND HIGH-ENERGY PHOTONS

Beam	Radiation unit	TLD set #	User stated dose [Gy]	IAEA (measured) dose [Gy]*	IAEA mean dose [Gy]	% deviation relative ** to IAEA mean dose	<u>IAEA mean dose</u> <u>User stated dose</u>
<i>Co-60</i>	<i>Rocus</i>	<i>DL1507</i>	<i>2.00</i> <i>2.00</i> <i>2.00</i>	<i>2.04</i> <i>1.97</i> <i>2.02</i>	<i>2.01</i>	<i>-0.3</i>	<i>1.00</i>

* The uncertainty in the TLD measurement of the dose is 1.8% (1 standard deviation); this does not include the uncertainty intrinsic to the dosimetry protocol (see IAEA TRS-398).

** % deviation relative to IAEA measured dose = 100 x (User stated dose - IAEA mean measured dose) / IAEA mean measured dose. A relative deviation with negative (positive) sign indicates that the user estimates lower (higher) dose than what is measured.

Agreement within +/-3.5% between the user stated dose and the IAEA measured dose is considered satisfactory.



J. Izewska, Ph.D.

TLD Officer - DMRP Section

Date: 2015-08-07



A. Meghifene, Ph.D.

Head - DMRP Section

IMPORTANT NOTICE: *This information is provided only as an independent verification of beam output and not as a machine calibration, nor as an alternative to frequent calibrations by a qualified physicist.*