

IAEA FEASIBILITY STUDY SABS VISIT – 21-08-2012

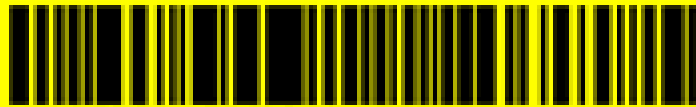


PERSON'S NAME

BIN 113812 Badge No **317541**

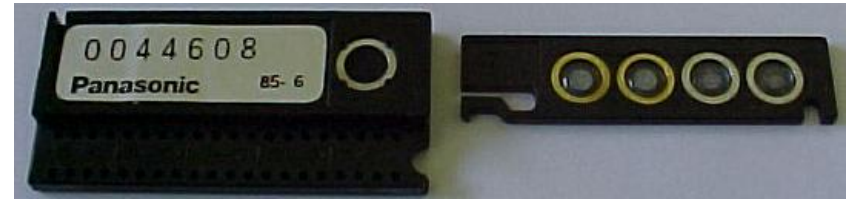
Place No: **3/2521** Sequence No: 1

Wearing Period: 2006-09-25 to 2006-10-22

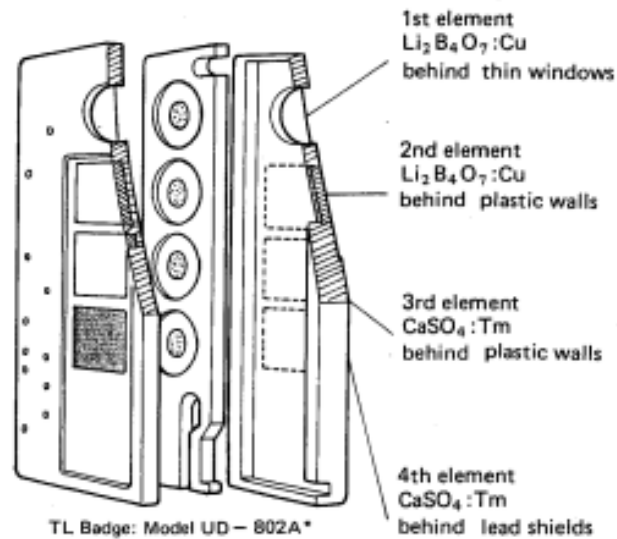


02521113812 0317541

SABS, Private Bag X191, Pretoria, 0001



- The RPS processes the dosimeter and reports the dose received.
- The RPS is purely a dose monitoring service – the regulators are the Directorate: Radiation Control of the Department of Health, and the National Nuclear Regulator
- The protection limits as recommended by the DoH & NNR and as prescribed by the ICRP 60
- RPS keeps the dose history of radiation workers



- Four measurements from four detectors
- Ratio of readings – dose calculation algorithm
- Estimate type(s) and energy of radiation
- Apply conversion factors to element responses to get deep and skin dose

SCHEDULE OF ACCREDITATION

Testing Laboratory Number: T0065

<p>Permanent Address of Laboratory: SABS Commercial Pty Ltd Radiation Protection Service No 1 Dr Lategan Road Groenkloof Pretoria</p> <p>Postal Address: Private Bag X191 Pretoria 0001</p> <p>Tel : (012) 428-6884 (Ms GM Mare) Tel : (012) 428-6493 (Lab) Fax : (012) 428-6685 Email : germa.mare@sabs.co.za : pogisho.maine@sabs.co.za</p>	<p>Technical Signatories : Mr TM Ramashidzha : Mr WM Maaba</p> <p>Management Signatory : Mr PM Maine</p> <p>Nominated Representative : Ms GM Mare</p> <p>Issue No. : 13 Date of issue : 11 June 2012 Expiry date : 31 January 2016</p>	
Materials/Products Tested	Types of Tests/Properties Measured, Range of Measurement	Standard Specifications, Equipment/Techniques Used
<p>PANASONIC PERSONNEL DOSIMETERS:</p> <p>TYPE UD 802</p>	<p>Measuring personnel dose equivalent $H_p(10)$ and $H_p(0,07)$ for X-ray and gamma radiation in the energy range 10 keV to 10 MeV and dose range 0,15 mSv to 7 Sv</p> <p>and</p> <p>Measuring personnel dose equivalent $H_p(0,07)$ for beta radiation in the energy range 0,24 MeV to 0,57 MeV (average energy) and dose range 3,85 mSv to 7,3 Sv</p>	<p>Thermal luminescence by optical stimulation using Automatic Panasonic Read-out machines UD 710A and UD 7900</p>

Original date of issue: 01 February 1998

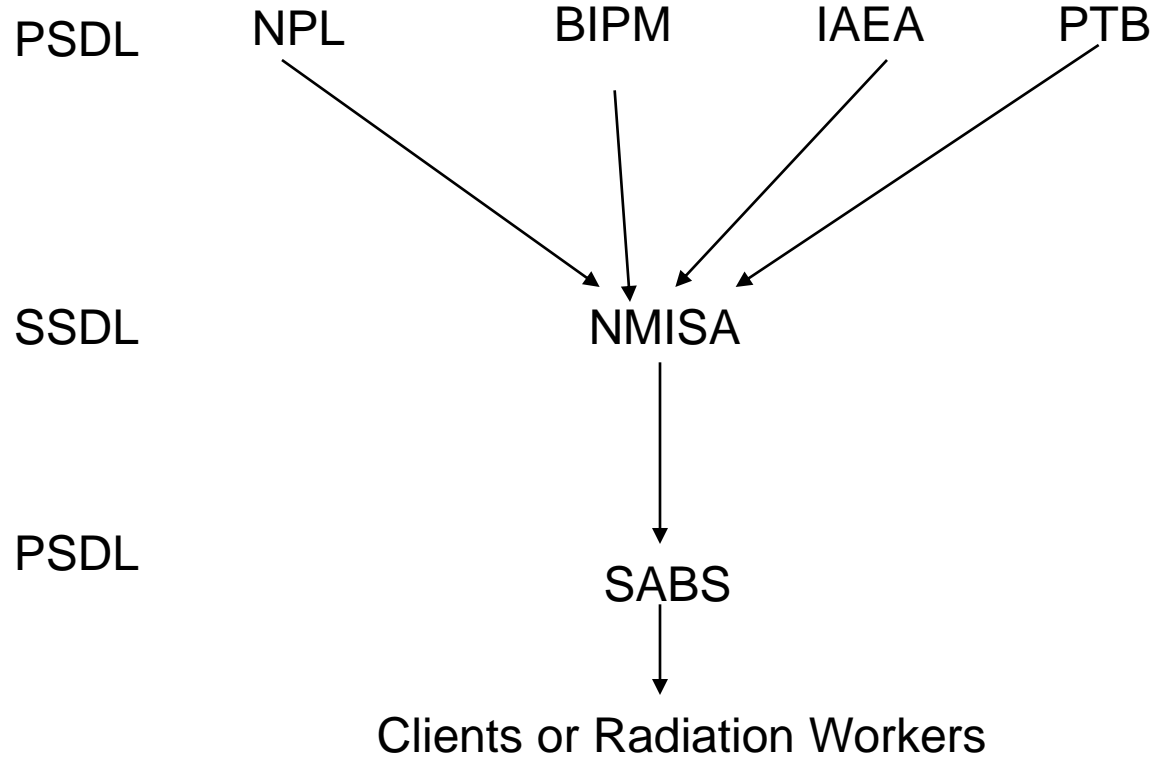
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Field Manager

Test Type	Radiation Type	Dosimeter Type	Energy Range	Dose Range	Detection Level	SANAS Accreditation	Dose Type
Whole Body Deep Dose	Photon & Beta	Panasonic	Photon Range: 10keV-10 MeV Beta Range: 0.24MeV- 0.57MeV	0.15 mSv to 7 Sv 3.85 mSv to 7.3 Sv	0.15 mSv 3.85 mSv	Yes	Hp (10)
Whole Body Deep Dose	Photon & Beta	Panasonic	Photon Range: 10keV-10 MeV Beta Range: 0.24MeV- 0.57MeV	0.15 mSv to 7 Sv 3.85 mSv to 7.3 Sv	0.15 mSv 3.85 mSv	Yes	Hp (0.07)
Whole Body Deep Dose	Neutron	Neutron	Photon Range: 500keV to 4.4MeV	0.15 mSv to 7Sv	0.15 mSv	No	Hp (10)
Extremity Dose	Photon	Extremity	Photon Range: 10keV to 10MeV	0.15 mSv to 16 Sv	0.15 mSv	No	Hp (0.07)

RPS measurements are traceably to international standards through proficiency testing schemes



Activity Schedule – Wearing Period Dates



<u>WPCode</u>	<u>WPBegin</u>	<u>WPEnd</u>	<u>Start Issue</u>	<u>End Issue</u>	<u>Return By</u>
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- 201208W1L04 2012-08-06 2012-09-02 2012-07-20 2012-07-27 2012-10-24
- 201208W2L04 2012-08-13 2012-09-09 2012-07-27 2012-08-03 2012-10-31
- 201208W3L04 2012-08-20 2012-09-16 2012-08-03 2012-08-10 2012-11-07
- 201208W4L04 2012-08-27 2012-09-23 2012-08-10 2012-08-17 2012-11-14

- 201209W1L04 2012-09-03 2012-09-30 2012-08-17 2012-08-24 2012-11-21
- 201209W2L04 2012-09-10 2012-10-07 2012-08-24 2012-08-31 2012-11-28
- 201209W3L04 2012-09-17 2012-10-14 2012-08-31 2012-09-07 2012-12-05
- 201209W4L04 2012-09-24 2012-10-21 2012-09-07 2012-09-14 2012-12-12

- **There are about 24 100 radiation workers registered with RPS, each of whom receives a dosimeter every 28 days.**
- **More than 310 000 dose results are processed every year**