

## Radionuclide Analysis Facility

## Gamma Analysis Report

Issued by Vernon Cupps

Report Date: August 22, 2011

Work Request #: 11-162

Submitted by: B. Brown on 7/5/11

Workbook: P-HPGe #1-10, page(s) 58-59

## **MI Collimator**

The Accelerator Division/MI Department submitted 1 steel tag sample, on Work Request# 11-162, for analysis of accelerator produced radionuclides. The sample was counted on detector P-HPGe#1.

The following table lists the radionuclides detected in the sample, along with the corresponding specific activity. If a sample activity was reported it has been corrected back to the time of sampling.

| SampleID#  | Location               | Container | Count Info     | Mass/Vol. | <b>Count Date</b> | Radionuclide | Activity (pCi/g) |
|------------|------------------------|-----------|----------------|-----------|-------------------|--------------|------------------|
| 110705BB01 | MI collimator Tag #011 | None      | 7200sec @ 10cm | 13.339 g  | 7/7/11 @ 10:05    | Co-60        | $20.9 \pm 4.5$   |
|            |                        |           |                |           |                   | Cr-51        | $1,990 \pm 310$  |
|            |                        |           |                |           |                   | Fe-59        | $1,550 \pm 140$  |
|            |                        |           |                |           |                   | Mn-52        | $1,140 \pm 80$   |
|            |                        |           |                |           |                   | Mn-54        | $544 \pm 83$     |
|            |                        |           |                |           |                   | Sb-122       | $8,400 \pm 830$  |
|            |                        |           |                |           |                   | Sb-124       | $1,090 \pm 80$   |
|            |                        |           |                |           |                   | Sc-44m       | $118 \pm 20$     |
|            |                        |           |                |           |                   | Sc-46        | $45.1 \pm 7.1$   |
|            |                        |           |                |           |                   | Sc-47        | $128 \pm 21$     |
|            |                        |           |                |           |                   | Sc-48        | $25.3 \pm 9.5$   |
|            |                        |           |                |           |                   | Ti-44/Sc-44* | $71.8 \pm 13.3$  |
|            |                        |           |                |           |                   | V-48         | $517 \pm 48$     |