

**Guidelines on Testing of old gold lying with the consumers from BIS
recognized AHC**

- a. Consumer can bring one or multiple pieces of jewellery lying with them for testing to BIS recognized Assaying and hallmarking centre (AHC).
- b. The lot brought by the consumer upto 10 pieces may be considered as a mixed lot and tested as per the provisions of mixed lots mentioned in the IS 15820: 2009.
- c. The jewellery brought by the consumer shall be weighed in presence of the consumer.
- d. Each article shall be tagged with a serial number for identification.
- e. Each jewellery piece should be individually checked by XRF for purity of gold and also for the absence of prohibited elements such as Iridium, Ruthenium, Cadmium and Osmium.
- f. Sampling should be done in such a way that there is minimum damage to the jewellery. The consent for the sampling method shall be obtained from the consumer before hand
- g. If desired by consumer the report may be issued for the jewellery tested only based on the XRF however in the report it should be specifically mentioned that XRF gives gold content of surface only and the purity checked by XRF may vary by ± 5 ppt.
- h. After testing by fire assay a test report should be issued to the consumer by the AHC in the format placed at Annexure-II The photograph and weight of the jewellery shall also be mentioned in the report.
- i. The jewellery along with cornets and remnants, if any, should be returned to the consumer on the same day. If due to any reason the fire assay could not be done on the same day, the jewellery should be returned to the consumer after XRF and only the sample retained by the AHC which shall be tested and cornet returned to the consumer the next day.
- j. The AHC shall be responsible for the purity tested by him and thus if the AHC has any doubt about the jewellery being hollow, wax filled or made of mixed metals etc the same shall be mentioned in the report.
- k. AHC shall charge Rs 35 per article for testing from consumer, however the minimum charges for one lot shall be Rs 200.
- l. Before testing the following should be informed to the consumer and also displayed at a prominent position in AHC that is easily visible to the consumer
 - i. That the purity of gold shall be tested by two methods. – a) XRF method b) Fire assaying method
 - ii. XRF method is a non-destructive, preliminary method and gives gold content of surface only. It may and may not represent average purity of the gold article. Purity certificate cannot be issued on the basis of XRF test only.
 - iii. Fire assaying method is a destructive method. It is, however, most widely used and accurate method for gold content globally.

- iv. Around 300 mg to 500 mg of sample is required to ascertain purity of gold jewellery by fire assaying. This weight of sample, therefore, needs to be removed from the article.
- v. After completion of fire assaying process pure gold cornets obtained from the sample taken above shall be returned to the consumer. Also the remnants of sample taken shall be returned to the consumer.
- vi. There may still be difference in the amount of sample taken and amount of pure gold cornet and remnants returned to the customer because the sample taken is of alloyed gold whereas the cornet is of pure gold without any alloying elements.
- vii. Sampling shall be done by AHC by scrapping, drilling or cutting depending upon the article size, type and design. Every precaution shall be exercised by the AHC in sampling to ensure minimum damage to the gold jewelry, however there may still be a slight damage to the jewelry while drawing sample.
- viii. Testing charges shall be Rs 35 per article, however the minimum charges for one lot shall be Rs 200.

Annexure-II

Name of the AHC

Address:

Test Report Of Gold Jewellery Received From Consumer

Test Article Receipt Date	
Test Performance Date	
Test Sample No & Report No	
Name of the Consumer	
Address & Contact Number	
Description of Article Received	
Photograph of article received	
Weight Of Article Received (In gm)	
Number of Article Received	
Hallmarked /Not Hallmarked	
Gold Content As Measured By XRF In Parts Per Thousand	
Presence/ Absence Of Undesirable Elements by XRF (Iridium, Ruthenium, Cadmium, Osmium)	
Method Of Sampling	
Sample Weight	
Gold Content In Parts Per Thousand	1 st Value: 2 nd Value: Mean Value:
Weight Of Article Returned (gm)	
Weight Of Pure Gold/Cornet Returned After Assaying(gm)	
Weight Of Remnants Returned (gm)	
Any Deviations From The Method Specified In The Standard	
Any Unusual Features Observed During The Determination	

Assay Master

(Signature)

Tested By

(Signature)

Certified

(Signature & Seal of AHC)