



TITLE MATERIAL TRACEABILITY		IDENTIFICATION MI LIGO-C950501-01-B			
		REFERENCE NO. 930212		SHT 1 OF 2	
PRODUCT LIGO BEAM TUBE MODULES CALIFORNIA INSTITUTE OF TECHNOLOGY		OFFICE RDE		REVISION 1	
		MADE BY PM	CHKD BY SWP	MADE BY SWP	CHKD BY WLR
		DATE 4/4/94	DATE 4/4/94	DATE 5/16/95	DATE 5/16/95

1.0 SCOPE

This procedure describes the system followed to maintain traceability of beam tube can sections, expansion joints, pump ports, and components.

2.0 REFERENCES

- 1) LIGO Specification 1100004, "Beam Tube Module Specification", dated May 11, 1993.
- 2) LIGO Specification 1100007 "Process Specification", dated May 11, 1993.
- 3) LIGO Quality Assurance Manual (QAM) to ANSI/ASQC Standard Q91.
- 4) Receipt Inspection Procedure, IR.
- 5) Coupon Outgassing Test Procedure , COUP-2.
- 6) LIGO Material Specifications and Purchasing Specifications.

3.0 QAM REQUIREMENTS

The basic requirements for material identification and traceability are stated in the LIGO QAM (reference 2.3). Additional requirements and clarification are specified in the following sections.

4.0 MATERIAL

- 4.1 Material shall be identified and tracked as required by the applicable material specification.
- 4.2 Information pertaining to material baking shall be considered part of, and be attached to, the CMTR.
- 4.3 Material coupon outgas test results shall be considered part of, and be attached to, the CMTR.

APPROVED

[Signature] LIGO 11/10/95

M. Jellison 11/10/95



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5.0 FABRICATED COMPONENTS

- 5.1 Fabricated components shall be documented and identified to maintain material traceability during fabrication.
- 5.1 Fabricated components identification shall be transferred as necessary to maintain visible traceability during and after beam tube section subassembly fabrication.

6.0 SUB-ASSEMBLIES (BEAM TUBE CAN SECTIONS)

- 6.1 Traceability is maintained by producing assembly check list. Fabrication including dimensional control, leak testing and cleaning of each subassembly (beam tube can section) is documented. This documentation includes the material/fabricated component identification which is unique to each subassembly.
- 6.2 Subassembly documentation shall be maintained as a unique package throughout fabrication, installation and testing. This documentation shall also include any repairs unique to the subassembly.

7.0 INSTALLATION

- 7.1 Traceability is maintained during installation through the use of check list. Check list provide material identification as well as welder and joint ID.
- 7.2 Unique documentation shall be maintained for each sub-module which includes check lists, cleaning, leak testing, and repair records as they apply to specific subassemblies and installation joints.
- 7.3 Unique documentation shall be maintained for each beam tube module which includes check list, cleaning, leak testing, and repair records as they apply to specific sub-modules and installation joints.