

LIGO - 8950009 - CO - B



1501 North Division Street
Plainfield, Illinois 60544-8929

FACSIMILE MESSAGE

Fax No. is: 815 439 6010
Verify No. is: 815 439 6000

Page 1 of 2

February 15, 1995

To: Larry Jones
LIGO Project Caltech Pasadena, California

Fax No. (818)304-9834

From: M. L. Tellalian Phone (815)439-6517

Plainfield Engineering - PAE

RE: Monitoring Procedure
LIGO Design & Qualification Test - Caltech Contract C146

Larry,

Attached is a monitoring procedure for the bake out. It is shown as a separate procedure but it may be best to incorporate the procedure into the Outgas Test Procedure or into the Emergency Procedure. I'll call you later on today to discuss the current bake out status and our monitoring plans.

Regards,

M. L. Tellalian
Plainfield Engineering



TITLE QTMONITOR BAKE OUT MONITORING PROCEDURE		IDENTIFICATION QTMONITOR			
		REFERENCE NO. 990212		SHT 1 OF 1	
PRODUCT LIGO BEAM TUBE MODULES QUALIFICATION TEST CALIFORNIA INSTITUTE OF TECHNOLOGY		OFFICE RCE		REVISION 0	
		MADE BY MLT	CHKD BY	MADE BY	CHKD BY
		DATE 02/15/95	DATE	DATE	DATE

1.0 SCOPE:

1.1 This procedure describes the methods to be monitored during the qualification test bake out. Monitoring will be accomplished by regular periodic logbook entries of specific system characteristics, regular system checks by security personnel during off hours, and procedures for safe and prompt LN2 dewar replacement.

2.0 LOG BOOK ENTRY

2.1 The following items shall be entered into the LIGO Logbook on odd hours from 7:00 AM to 11:00 PM on normal work days, at approximately 8:00AM, 4:00PM, and 12:00AM on weekends, and whenever a dewar is changed:

- Approximate amperage from weld machines #2 through #9
- Amperage from weld machine #1
- Control thermocouple temperature
- System pressure as measured on CC1
- Measured dewar weight
- Dewar tare weight
- Estimated time remaining on dewar in service.

3.0 DEWAR REPLACEMENT PROCEDURE:

3.1 Dewars shall not be moved by one person working alone. Piping has been established such that two dewars are available for use. Empty dewars shall be replaced immediately during normal working hours and as soon as two people are available when a dewar is emptied on off hours.

3.2 The vacuum room must be staffed when the estimated time remaining on a dewar is less than one hour.

4.0 SECURITY PERSONNEL SYSTEM MONITORING:

4.1 Security personnel shall monitor the following items on an hourly basis from 11:00 PM to 7:00 AM:

- CC1 Pressure to confirm the the pressure is in the -7 or -8 range.
- Indicator lights showing operation of the roughing pumps and V-3 & V-10 open lights.

4.2 In the event that an upset condition exists, Security Guards are to notify personnel in the following order until one of the individuals is contacted and spoken to personally.

- Steve Peters 708-305-9879
- Warren Carpenter 708-665-0297
- Marty Tellalian 708-771-2326
- Marty Tellalian 708-627-4714

Recorded messages or messages given to any other individuals are not considered to be successful notification and the next individual listed shall be called.