



Status of MACRO PMT pressure tests at SAB

Logan Lebanowski, Shih-Kai Lin

University of Houston

Sep 23, 2010

pressure test results

- ▶ As of September 23, we have passed 47 of 50 PMTs.
- ▶ 11 PMTs were tested during the past week (September 16 - September 22). PMT 8870 had a hole in the cable jacket. It was fixed and tested again.

SN	mass (g)	pressure (psig)	test time (h:m)	result
7851	564	12.1	14:48	PASS ¹
7127	582	12.2	8:51	PASS ²
7820	595.5	12.0	14:44	PASS ³
7267	643.5	12.0	8:44	PASS ²
7934	609	12.0	14:48	FAIL ⁴
8430	554	12.0	47:23	FAIL ⁵
8870	587.5	12.0	7:27	PASS ²
7899	566	12.0	16:24	PASS ³
7765	573	12.1	7:05	PASS ³
7471	601	12.0	14:56	PASS ¹

Table 1: pressure test result: For PASS/FAIL reasons, please see the table in the next slide.

PASS/FAIL reasons

number	reason
1	Cable dry. No leaks or cracks.
2	1+Some water penetrated the mastic tape seal of the cable strain relief plug, but did not penetrate the UW cable plug.
3	Moisture on the SHV end in the sealing tube. Conductivity test performed.
4	Acrylic cap contains much water.(see photo)
5	A big crack and a little hole in the PMT. Photocathode was gone.(see photo)

Table 2: PASS/FAIL reasons

photos: PMT 7934

