Sandia National Laboratories
Albuquerque, New Mexico 87185

May 20, 1981

Mr. Richard Sherry
Experimental Advanced Safety
Technology Research Branch
Division of Reactor Safety Research
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Rick:

Enclosed are the current predictions from our analysis of the FITS-1G experiments. We have developed a simple model for the fuel-coolant quenching process and the condensing atmosphere.

From this model, we have predicted the transient results of FITS-1G assuming a fuel debris fragment size of 10 mm. I think that these results are what you had requested of Marshall Berman recently. Note that these predicted values are based on the newly developed condensation model which was presented at Mid-Year Review.

Sincerely,

Mike

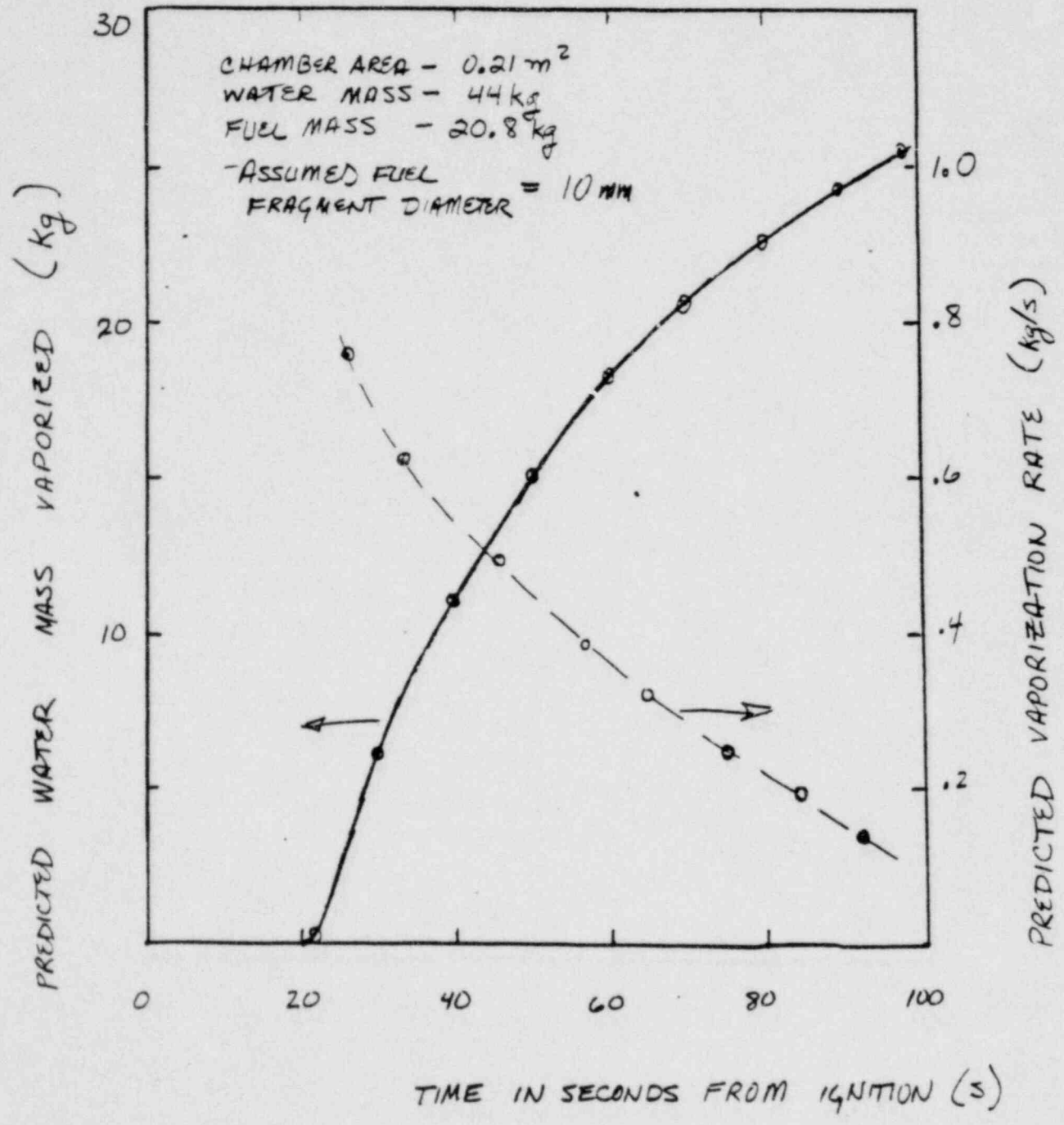
Michael L. Corradini
Reactor Safety Studies
Division 4441

MLC:4441:pr

Enclosures (3)

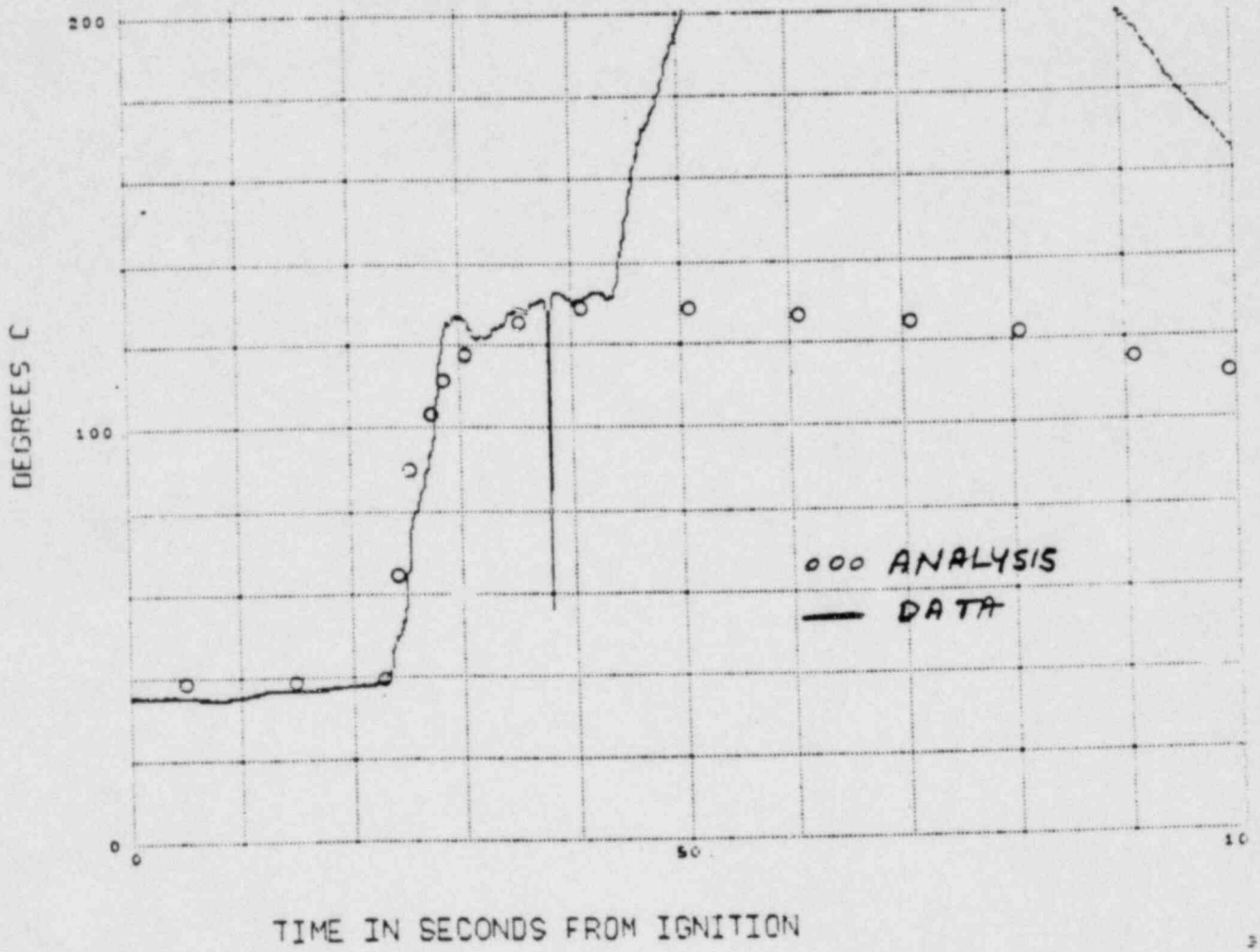
Copy to: M. Berman, 4441
M. Corradini, 4441

WATER MASS VAPORIZED – FITS-1G



FITS-1G

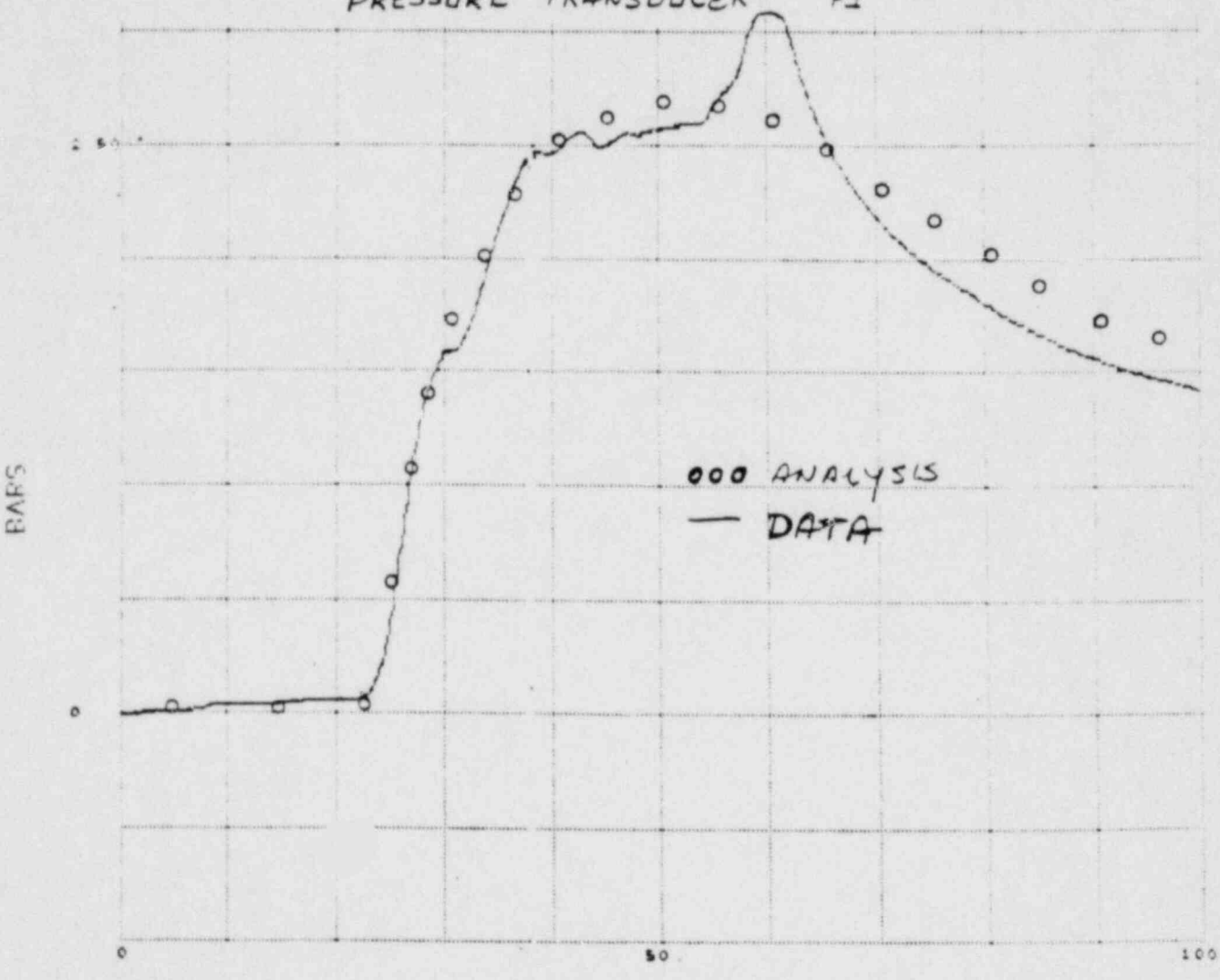
THERMOCOUPLE T1



TIME IN SECONDS FROM IGNITION

FITS-14

PRESSURE TRANSDUCER P1



TIME IN SECONDS FROM IGNITION