N61165.AR.004992
CNC CHARLESTON
5090.3a

ASBESTOS DOCUMENT VISUAL BUILDING ASSESSMENT FOR BUILDING 13 CNC CHARLESTON SC
01/16/2011
CONCEPT TECHNOLOGIES, INC

CONCEPT
TECHNOLOGIES, INC.
Construction and Environmental Health Solutions

January 16, 2011

Mr. Ray Anderson
City of North Charleston
2500 City Hall Lane
North Charleston, SC 29406

RE: Visual Building Assessment - Environmental Concerns - Building Number 13 - Old Navy Base

Dear Mr. Anderson,

Pursuant to your permission, Concept Technologies, Inc. performed a visual inspection of the above referenced building to identify potential environmental and safety concerns that may exist within the building envelope. This assessment took part via a three visit inspection of the building interior.

No as built drawings were provided nor copies of previous assessments or inspections. CTI has to assume that none exist. There is evidence of some type of inspection and/or testing as the building as many obvious sample locations are tagged. Due to the apparent age of the building and some of the known uses, many potential environmental issues may exist.

The building was constructed in an era when asbestos and lead based paint were extensively used. OSHA 1926.62 requires compliance when construction activities involving lead paint are conducted in any commercial building. Evidence exists of asbestos containing materials due to previous tagging and labeling. Most of the previous labeling for asbestos is on thermal system insulation. Other potential asbestos containing materials would include various types of flooring finishes, plaster wall and

2990A Technical Parkway North Charleston, South Carolina 29406
(888) 298-0601 toll free (843) 881-1032 office (843) 881-1476 fax

ceiling finishes, drywall joint compound, mastics, machinery gaskets, furnace refractory insulation and certain paints. SCDHEC regulation 61-86.1 requires a current asbestos inspection prior to disturbance of any suspect building material by way of renovation, clean-up or demolition. OSHA regulation 29CFR 1910.1001 requires a current inspection pursuant to the requirements of AHERA prior to occupancy in order to warn occupants, custodians and contractors of the presence, location and condition of asbestos containing materials. OSHA 29CFR 1926.1101 requires compliance when construction activities are conducted in a building that is built no later than 1980. SCDHEC Bureau of Land and Waste Management will require all regulated waste materials to be tested and profiled for proper disposal as either C&D waste, Asbestos Waste, Lead Contaminated Waste or otherwise chemical waste. Depending on the concentration of specific contaminants, testing will determine how each material should be profiled for disposal.

The building has several elevators where interior flooding may have caused the accumulation of water in the elevator pits. This type of water commonly is contaminated with petroleum products. The apparent age of the building would suggest that PCB containing light ballasts may be present throughout the building. In addition, the old fluorescent lamps are a regulated waste due to their mercury content.

The second floor houses several old laboratories. These areas have been hard hit by storm water intrusion and are in very poor condition. There is evidence of significant erosion due to the storm water as well as due to potential corrosion inducing chemical residues. All of the laboratory counter tops appear to have crocidolite asbestos containing tops and sinks. Each of the lab areas is full of old analytical equipment, all of which may have some level of contamination from the chemicals historically used in them and would require special handling and disposal. Many empty chemical bottles were found that may have regulated residue and require special handling. Some odd containers have a physical accumulation of some type of unidentified liquids and solids in them. There exists an inventory of cathode

lamps in some of the cabinets that potentially contain heavy metals and would require special handling and disposal.

The condition of the buildings finishes are in a very deteriorated and damaged condition. If any of the building materials contain asbestos, it can be presumed that asbestos dust proliferates most spaces. As with the existing paints, the condition on most surfaces is significantly damaged and has delaminated and become crushed into dust. Unprotected entrance inside this building should not be allowed due to the significant potential hazards. The building is currently open and should be locked with proper signage as to the potential hazards.

There are many safety hazards that exist within the building that should also prevent entrance to the building. The roof is obviously significantly damaged due to the multiple water intrusion points that readily traverse through all floors. The condition of the flooring and sub-flooring is dangerous to foot traffic due to rot. Many areas of the second and third floor have penetrations through them as a result of wood rot. The flooring structure on the second floor appears to be the worst. The electrical systems don't appear to be operational but there is no evidence of proper lock-out /tag-out signage. The potable and utility water supply system obviously has not been used in many years. The water that may reside in the water systems should be flushed by individuals with proper training as the water likely contains legionella bacteria. There is evidence that pigeons have nested in the building which would cause concern of cryptoccocus neoformans bacteria found present in pigeon feces. Other concerns would include petroleum products and residues from heavy equipment that is housed on the first floor. Open pits under some of this equipment are full of water and an oil sheen is present.

Due to the significant and long term water intrusion as well as humidity during the warm months of the year, mold is present on most building finishes. The type of mold that

is likely present would be the slow growing fungi that dominate when a moisture and food source is present for a number of years. These types of fungi are more toxic in nature and are opportunistically pathogenic to humans. Additionally, all of the interior wall finishes are degraded to a condition that they likely need to be demolished and replaced. Consistent water damage has also rotted much of the structural wood to a point it should be demolishe d and replaced. Some of the vertical structural support columns show signs of serious damage. We advise that the City retain a structural engineer to assess the structural condition of the building.

CTI recommends that a comprehensive environmental audit be performed on the interior as well as on the soil and ground water on the property to ascertain information and data that would identify all environmental, safety and health concerns.

Should you have questions or need additional information, please contact me at (843) 881-1032.

Respectfully,

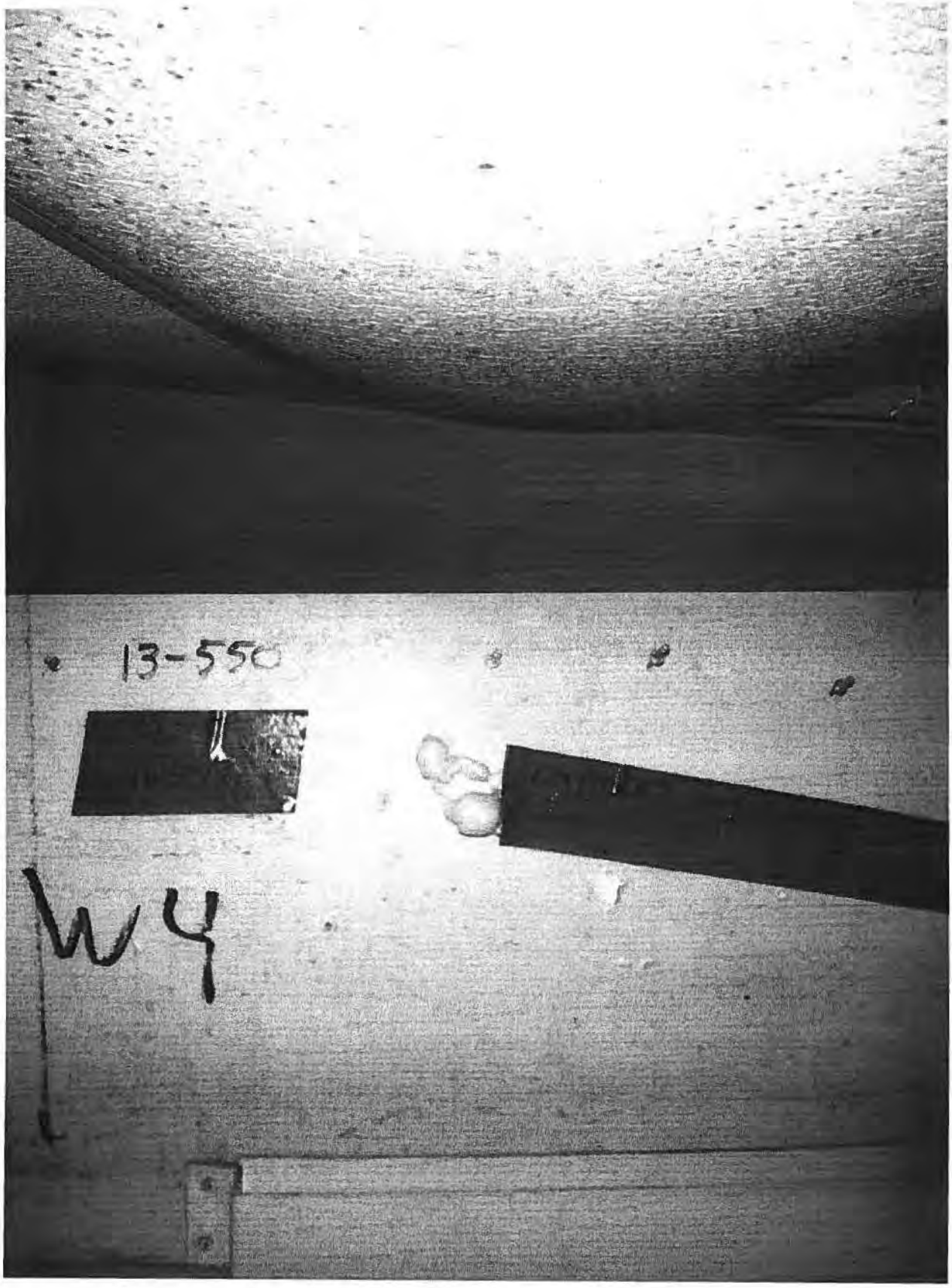
CONCEPT TECHNOLOGIES, INC.

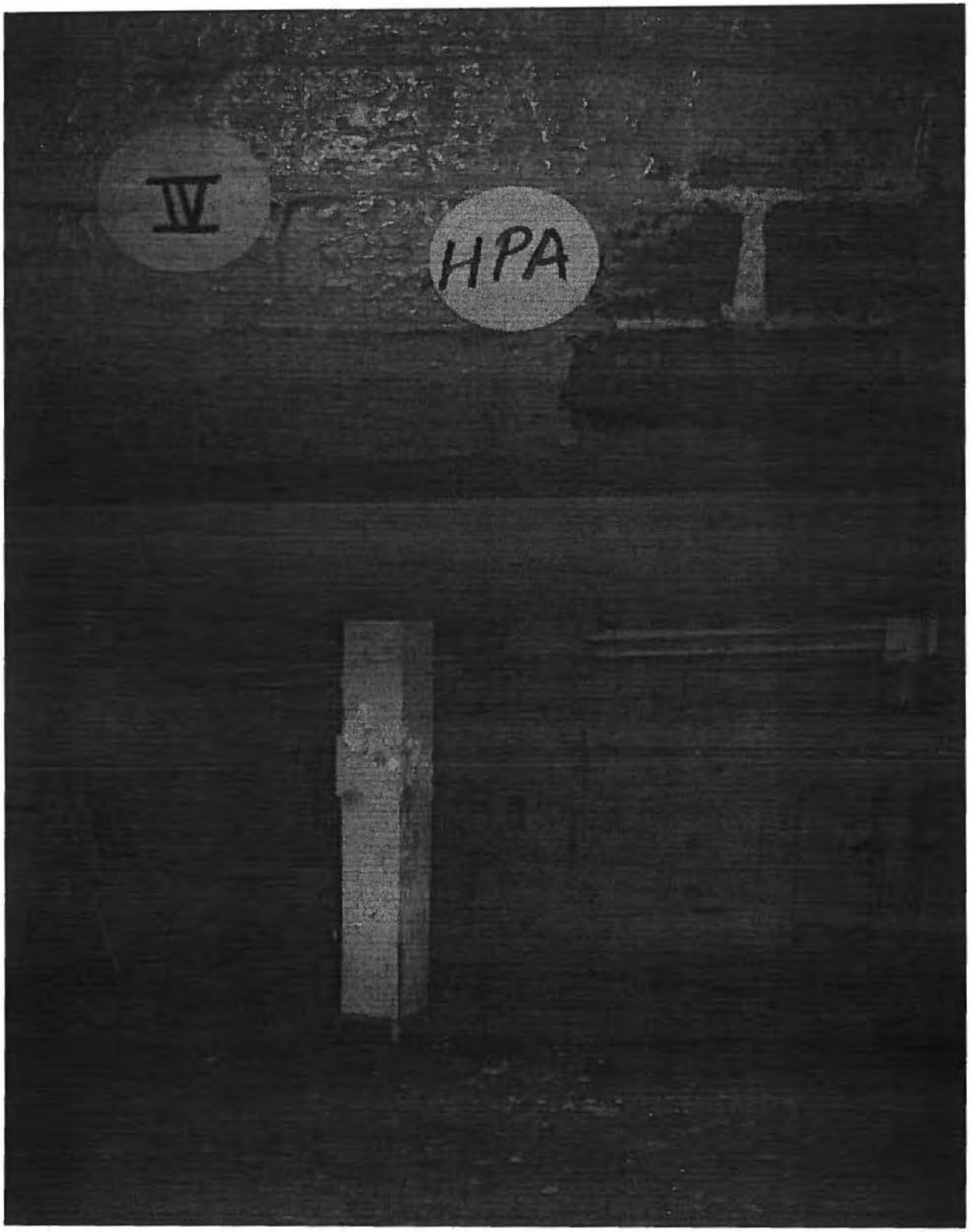
J. Mark Ivey, CIE, ASCS
President / CEO
Industrial Hygienist

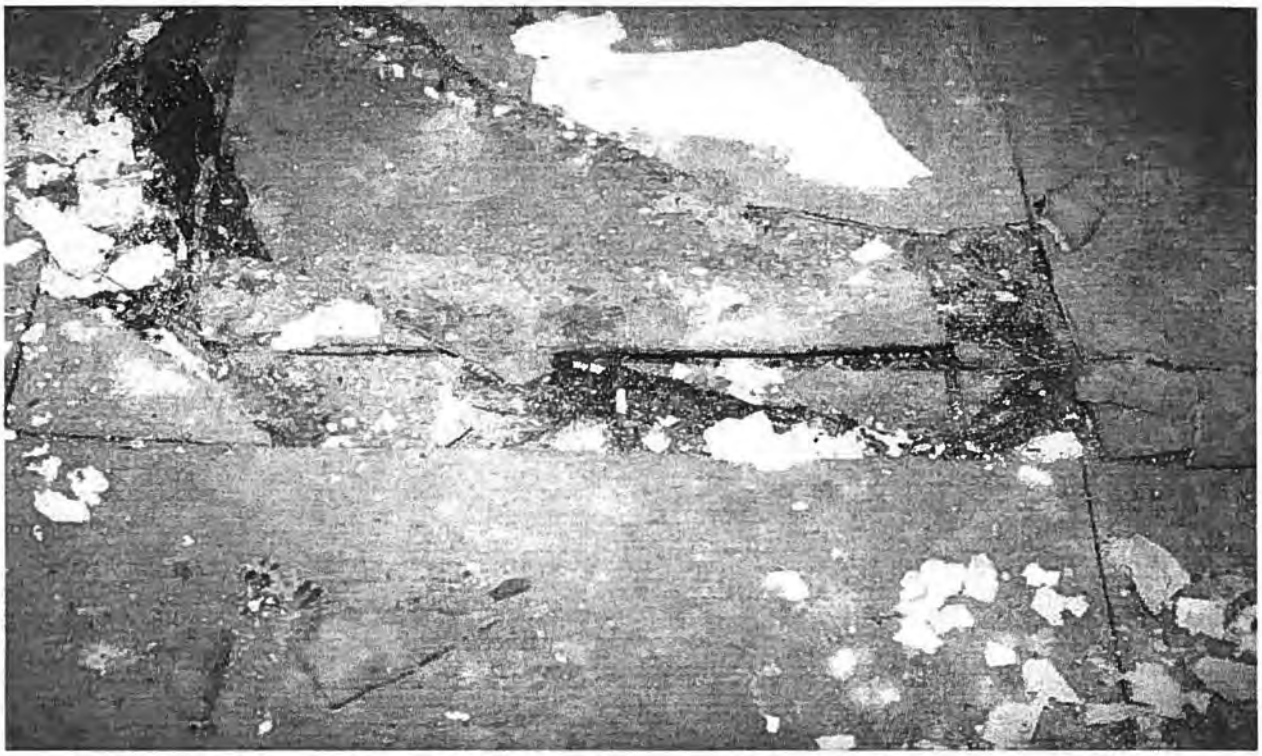
enclosures

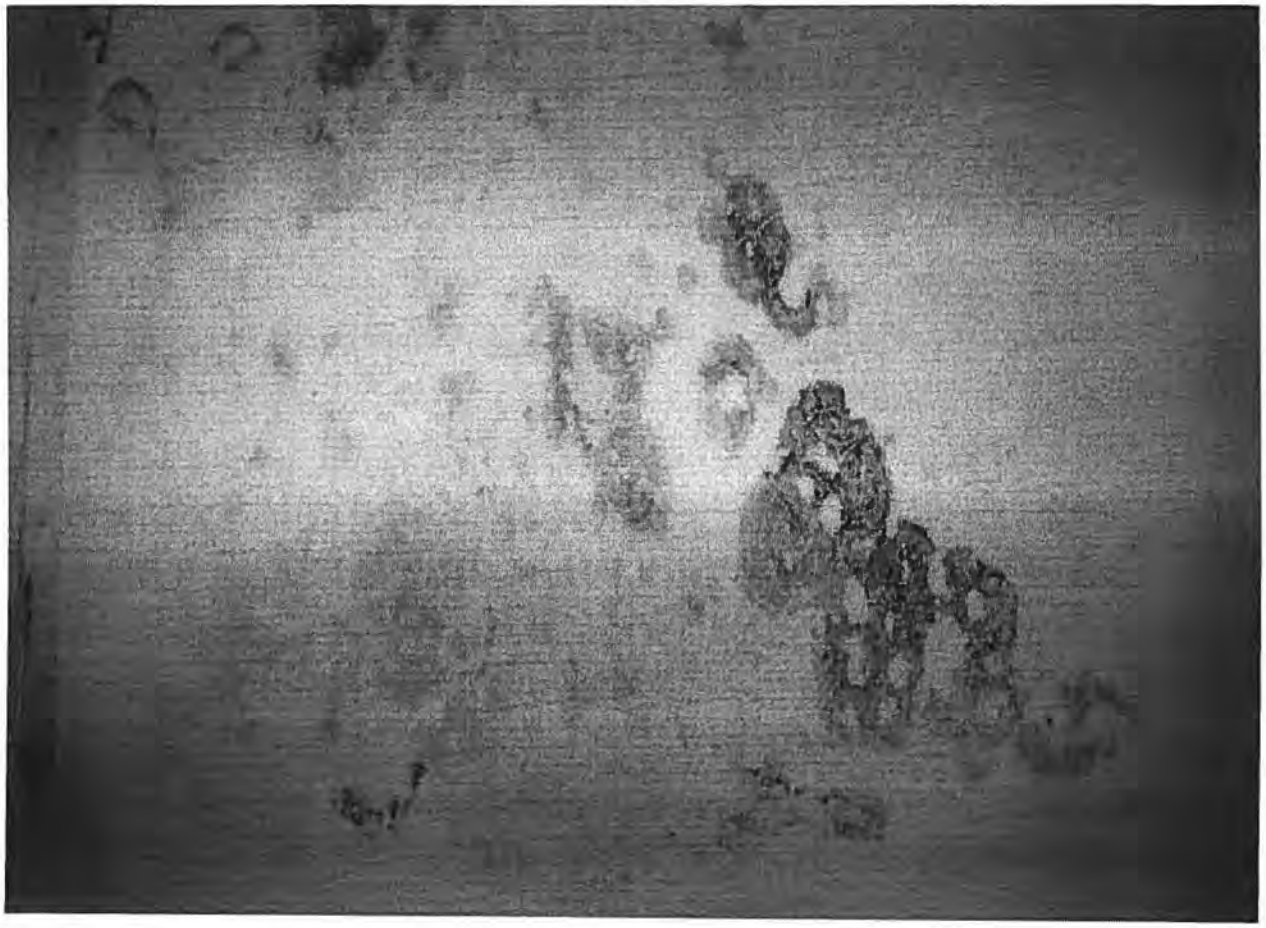
2990A Technical Parkway North Charleston, South Carolina 29406
(888) 298-0601 toll free (843) 881-1032 office (843) 881-1476 fax

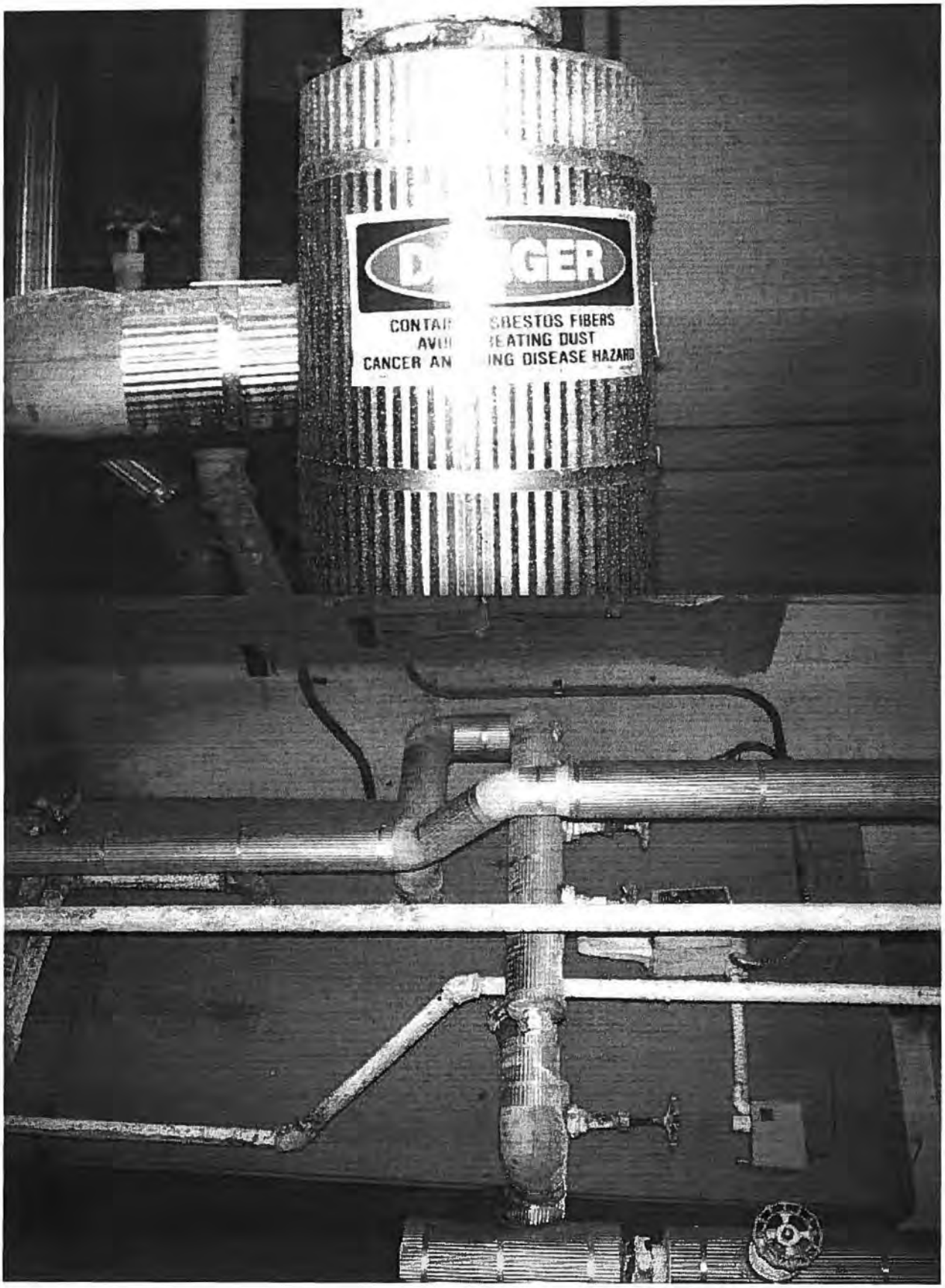
1093

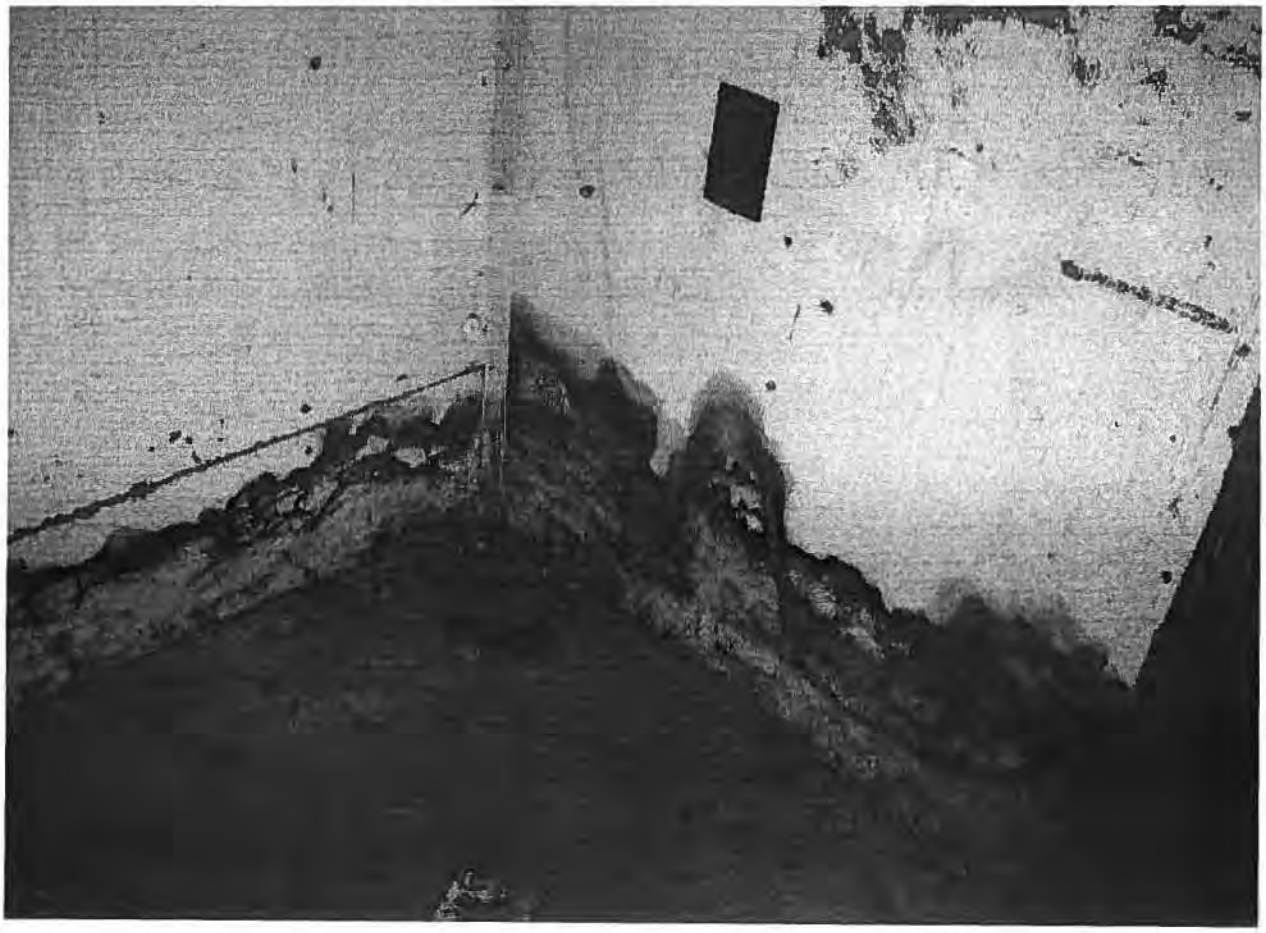

13-550
W4


IV
HPA

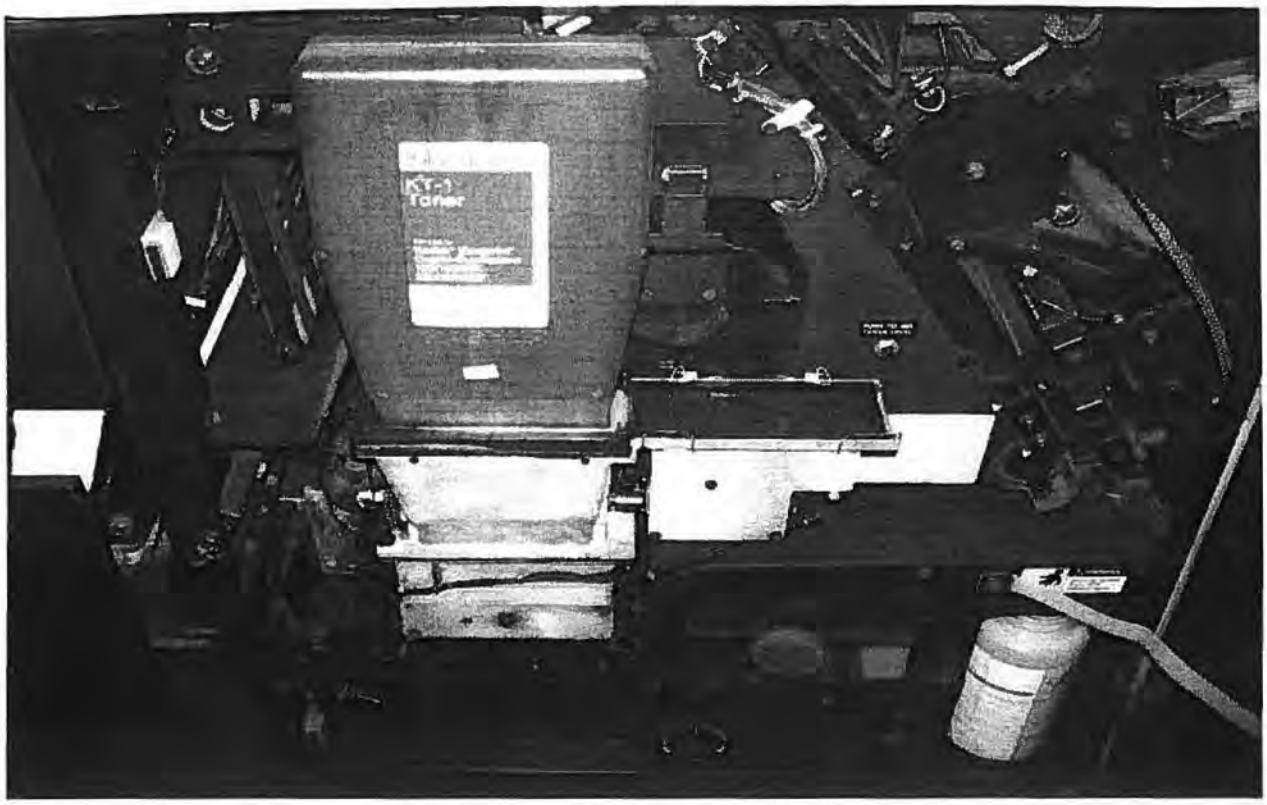


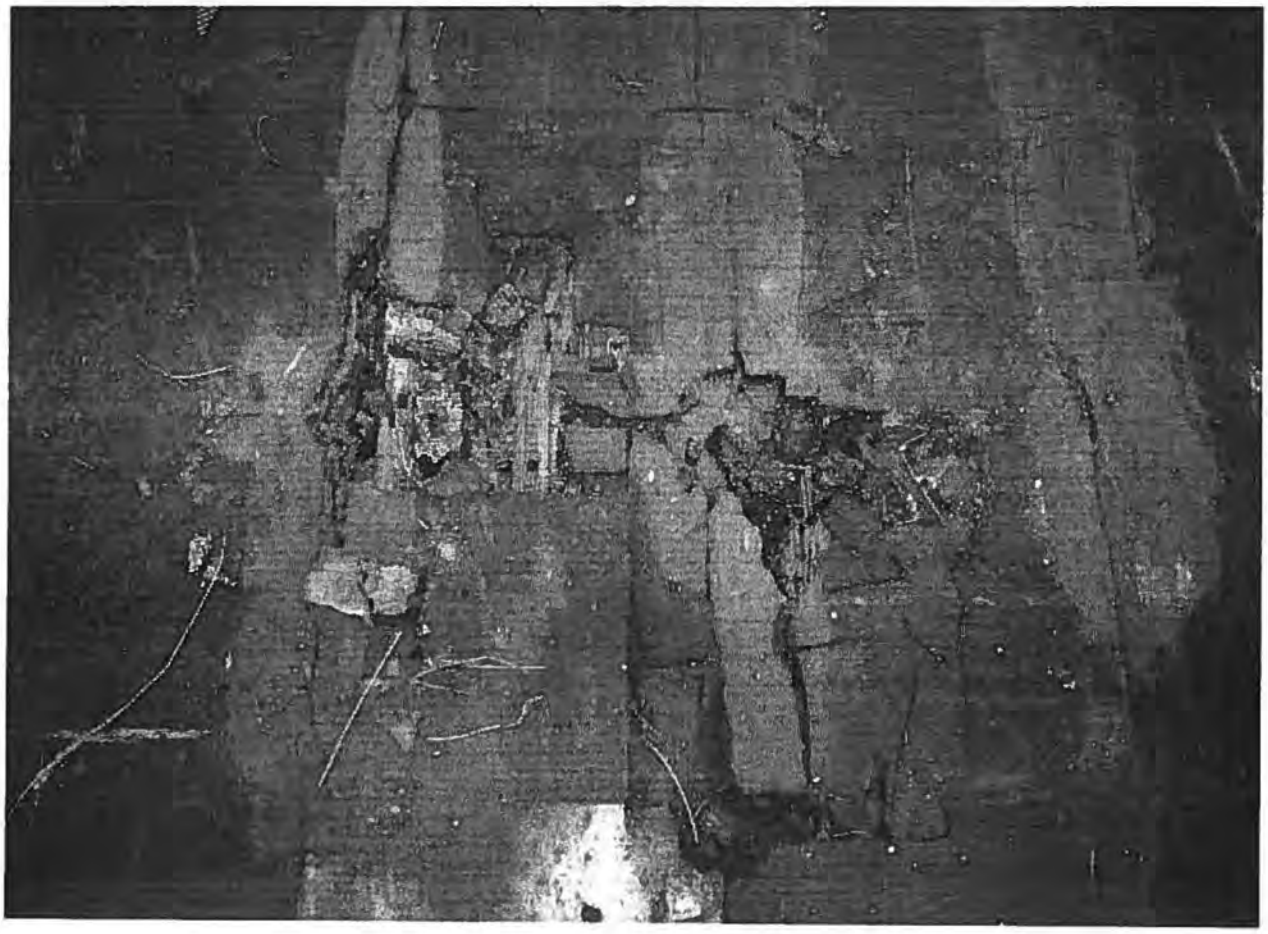


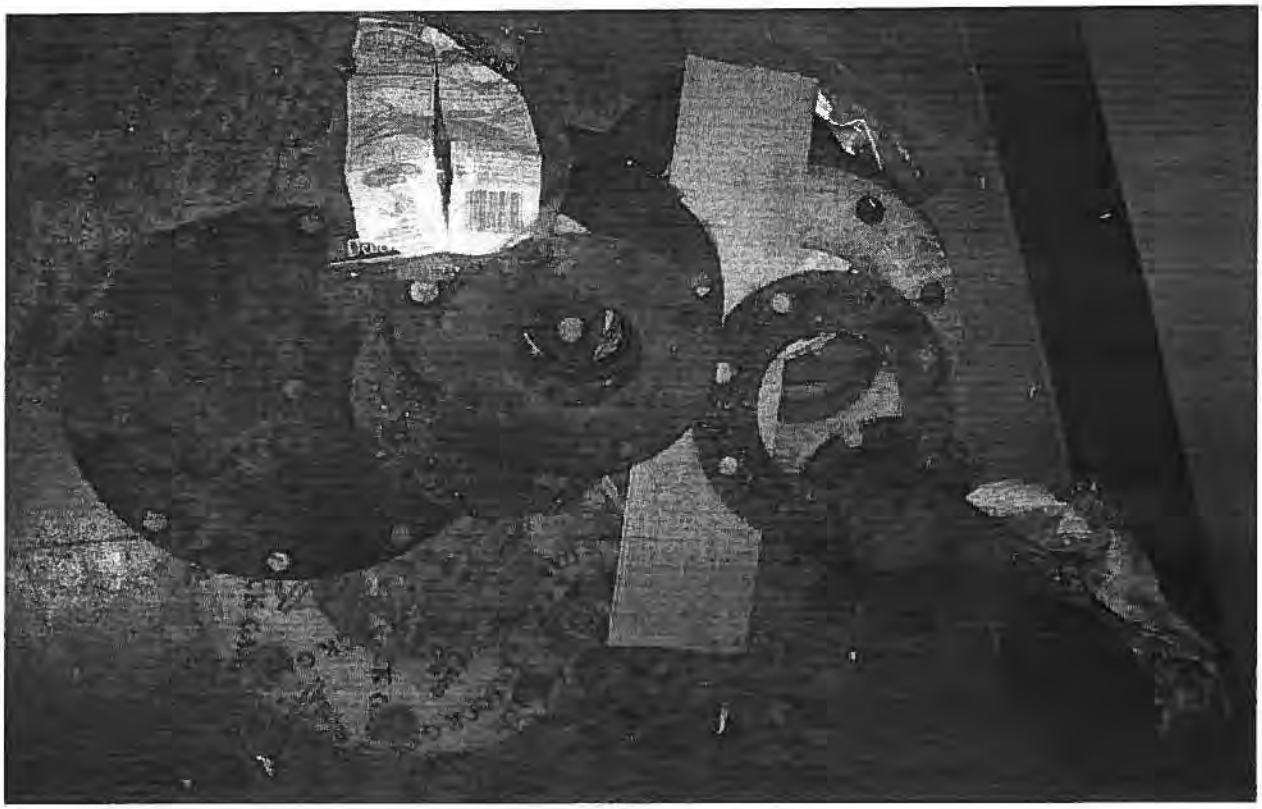

GER
CONTAI BESTOS FIBERS
AVU EATING DUST
CANCER AN ING DISEASE HAZARD

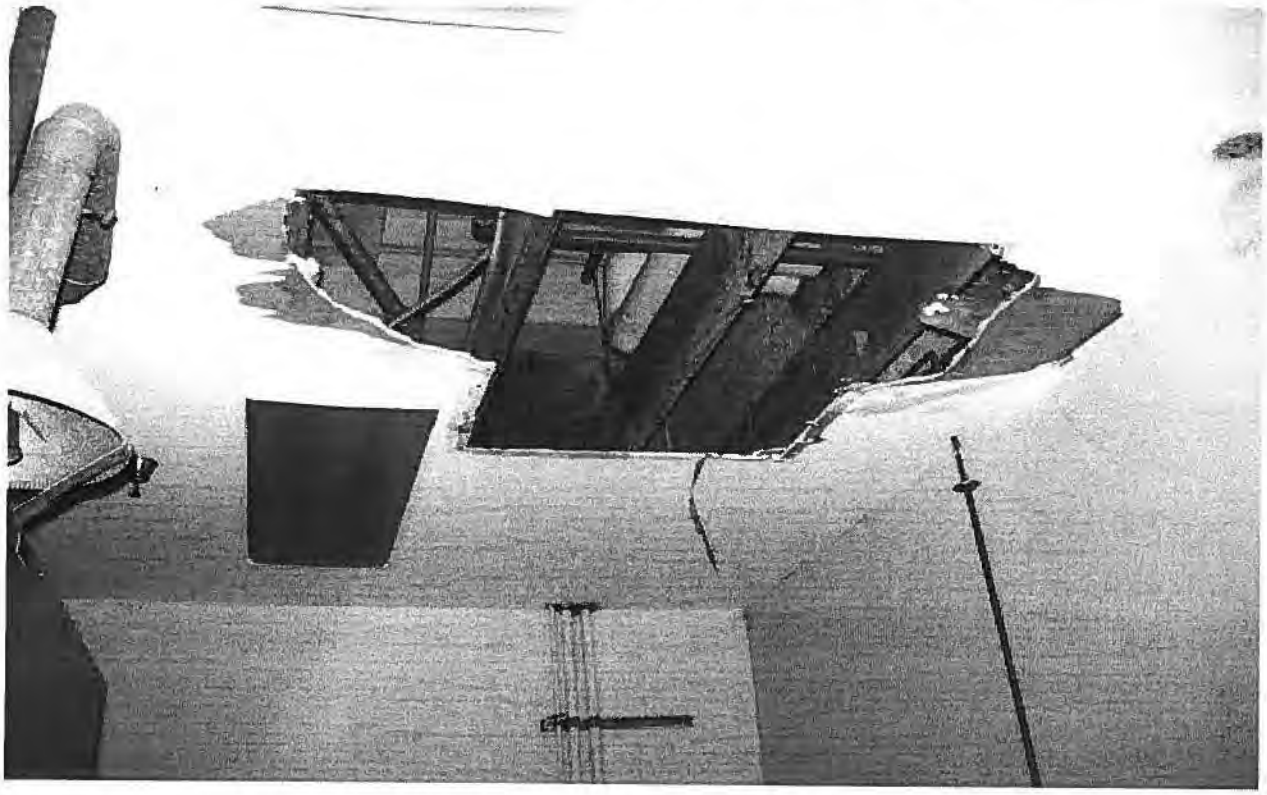


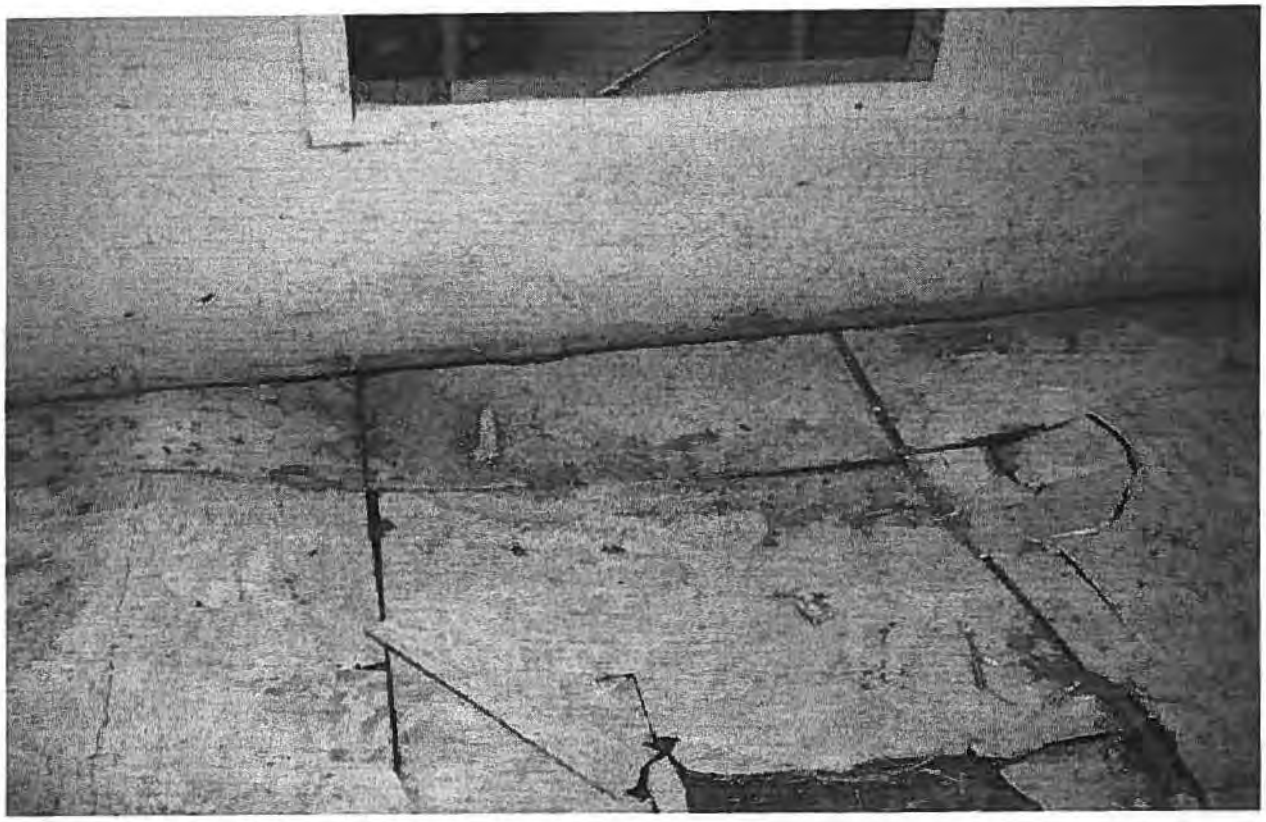
DANGER
DO NOT OPERATE
DANGER
DO NOT OPERATE
DANGER
DO NOT OPERATE
4 - 11

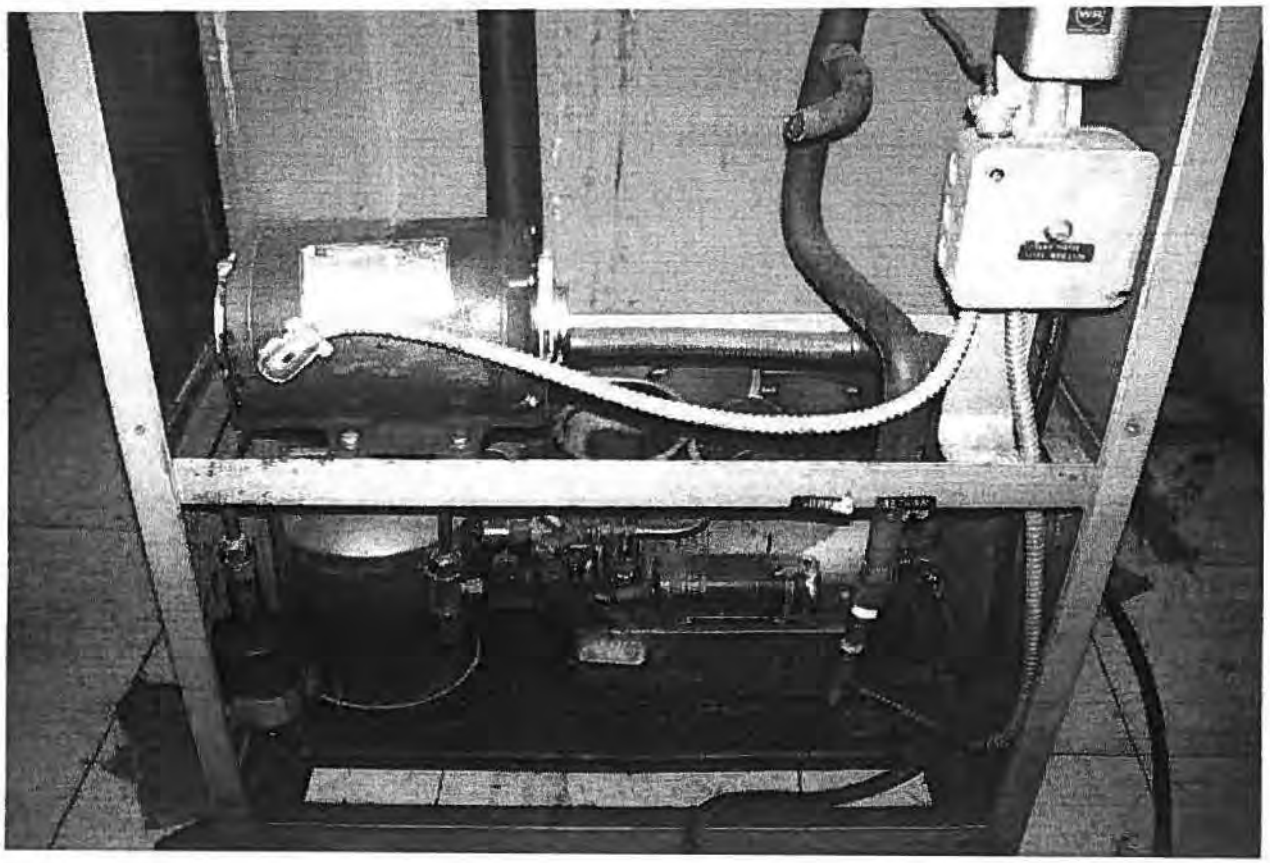

KT-1
Toner

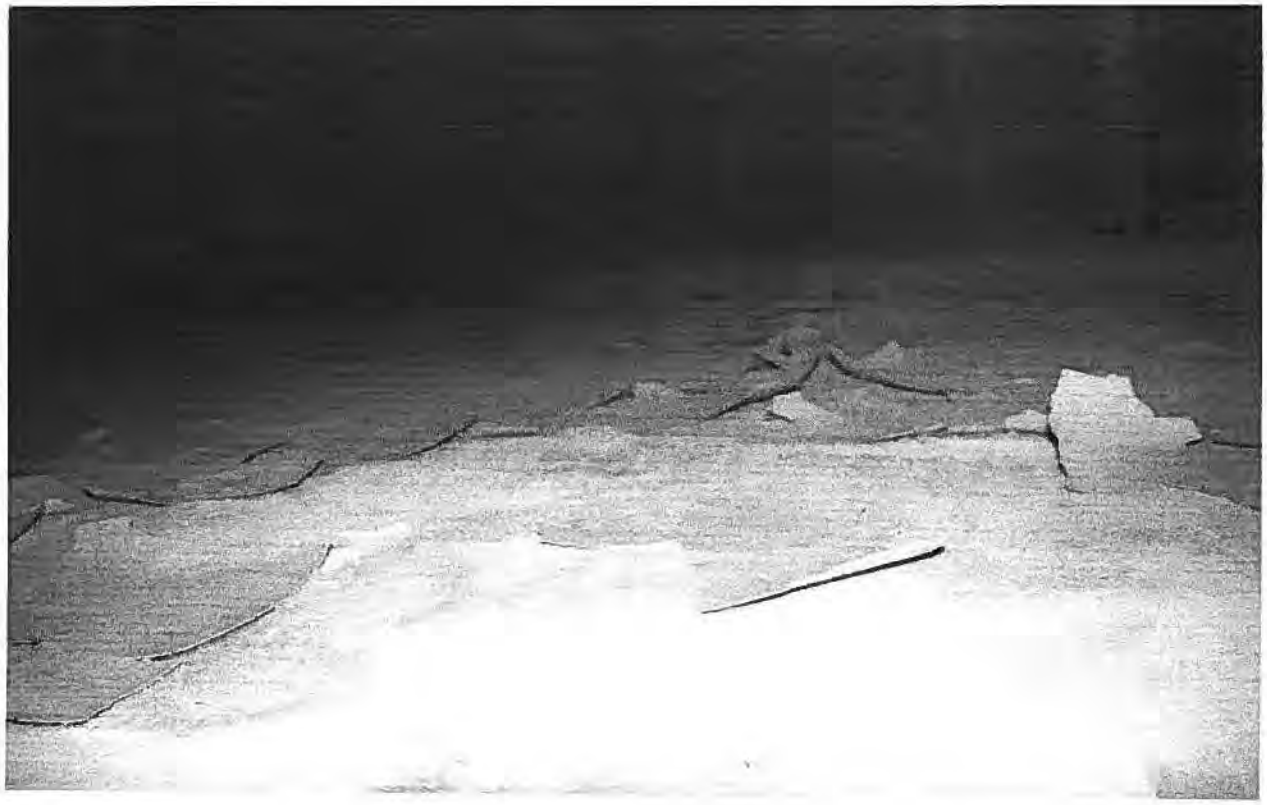


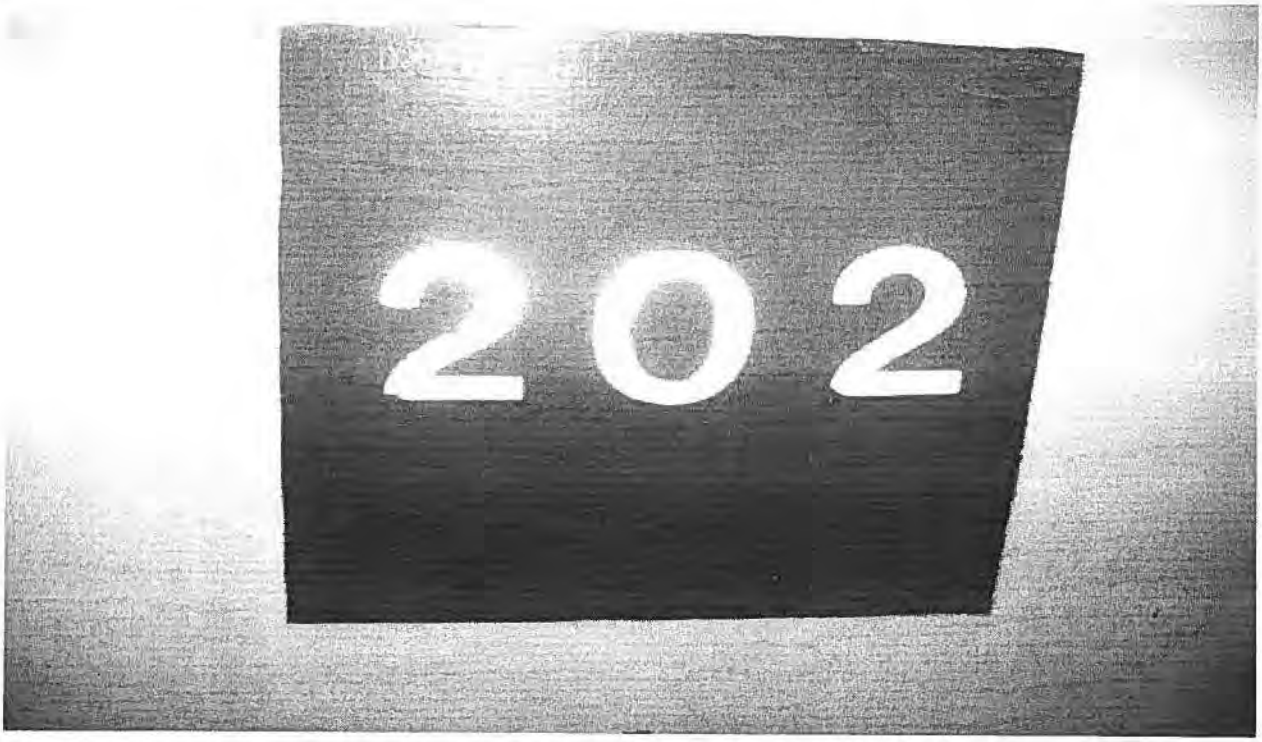




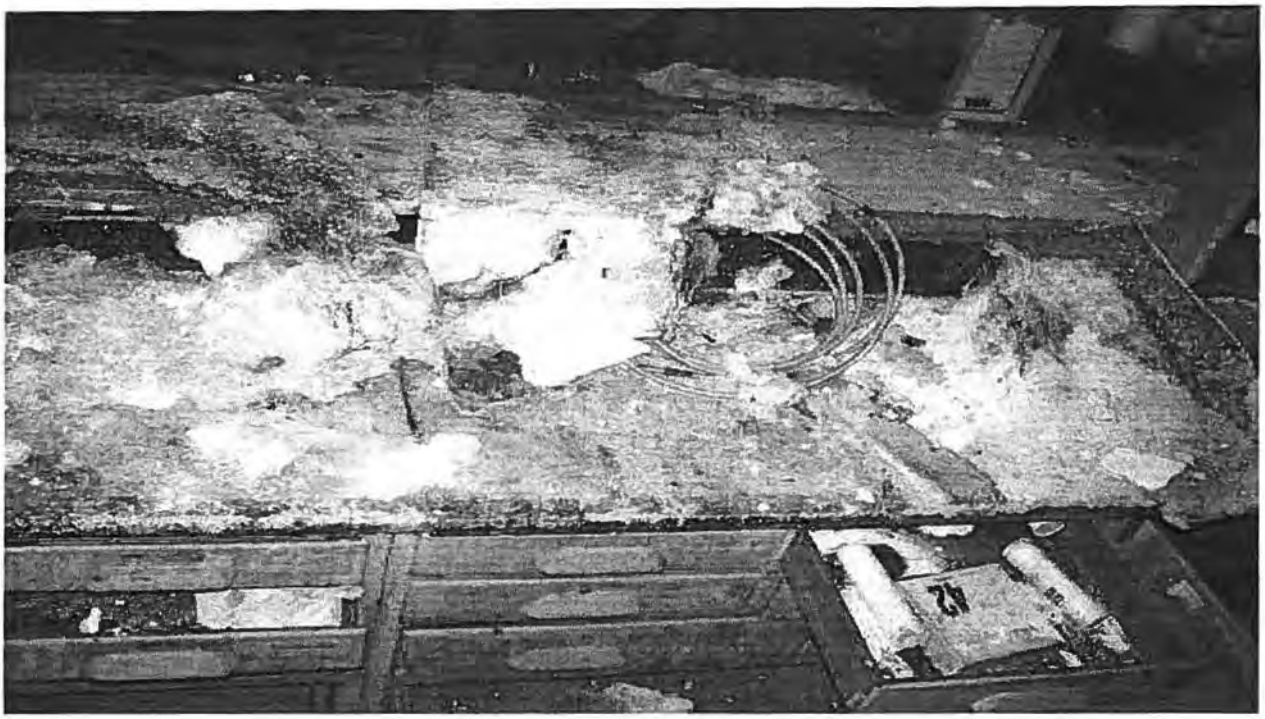


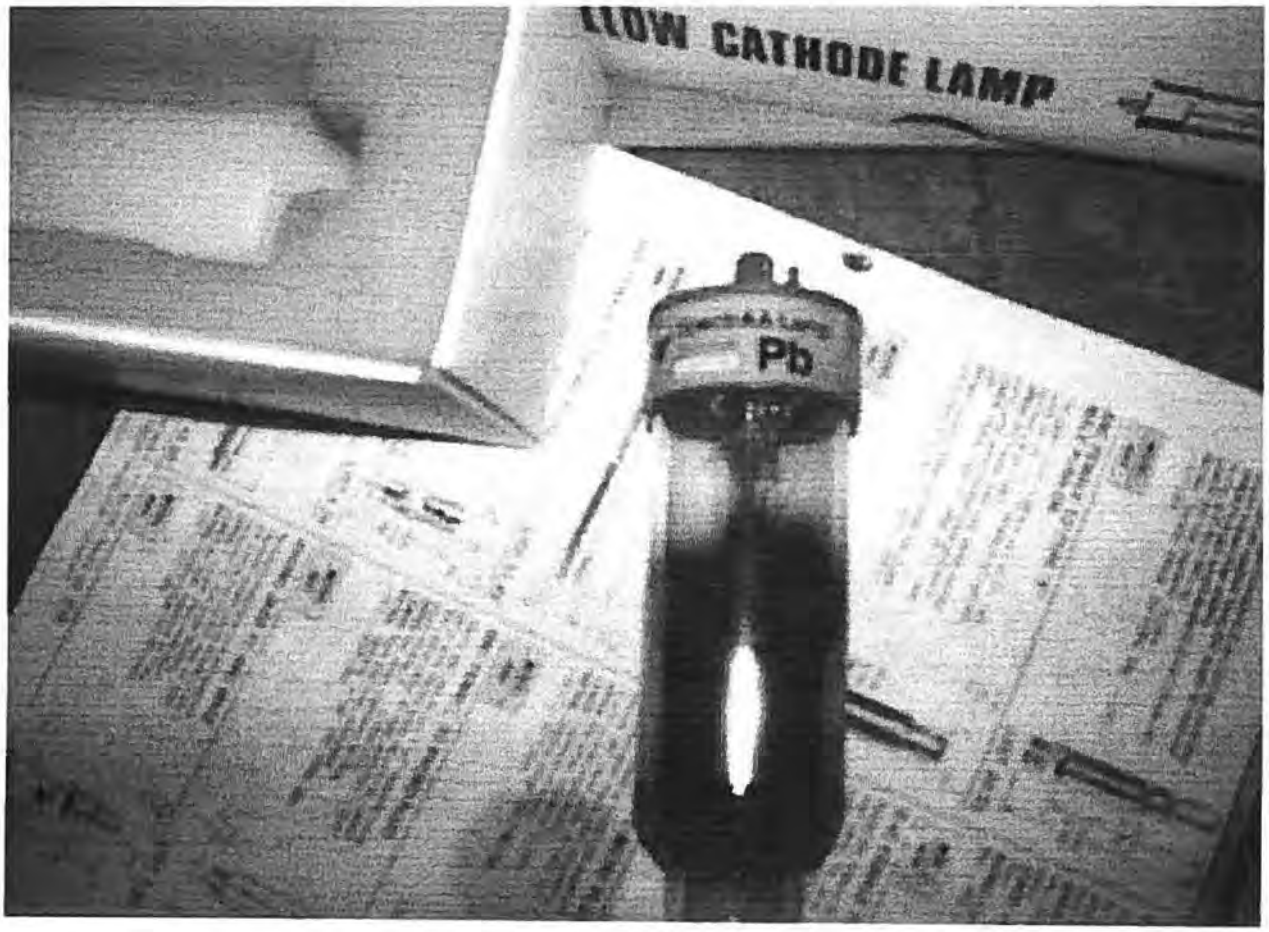





202

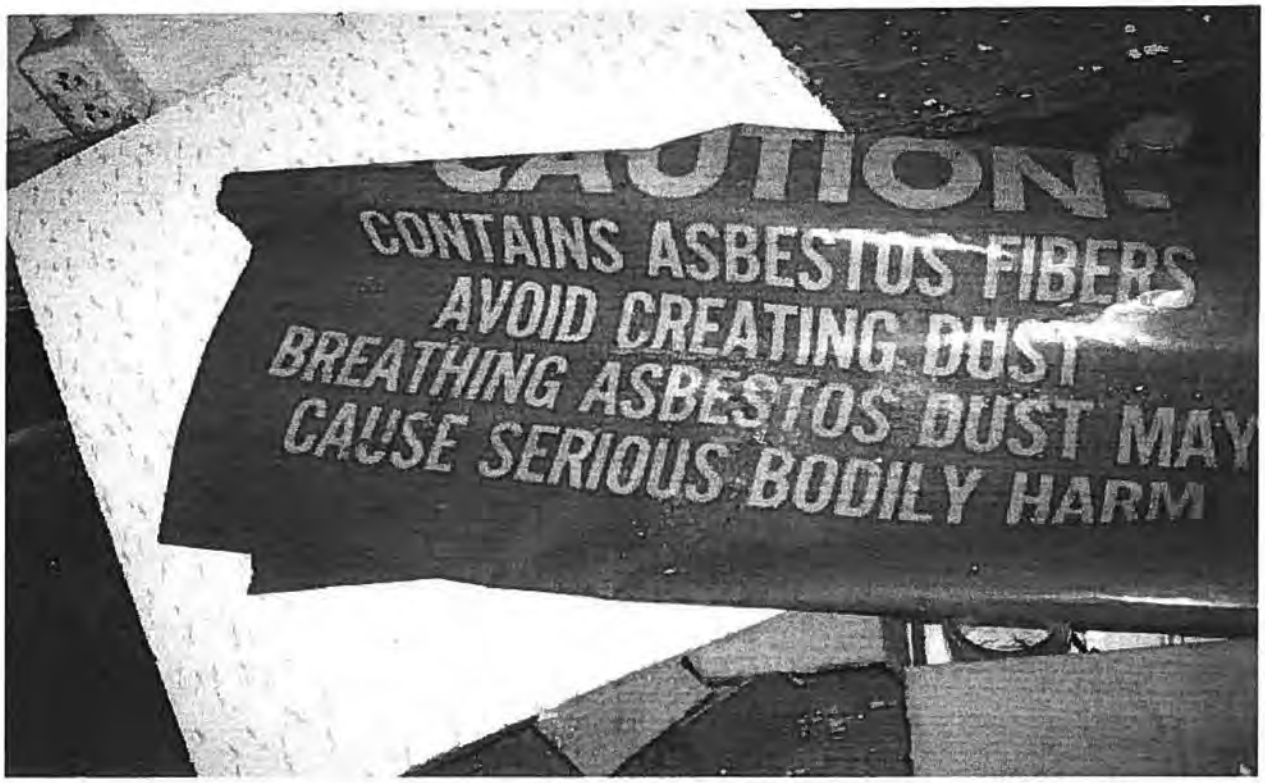
CAUTION
EYE WASH

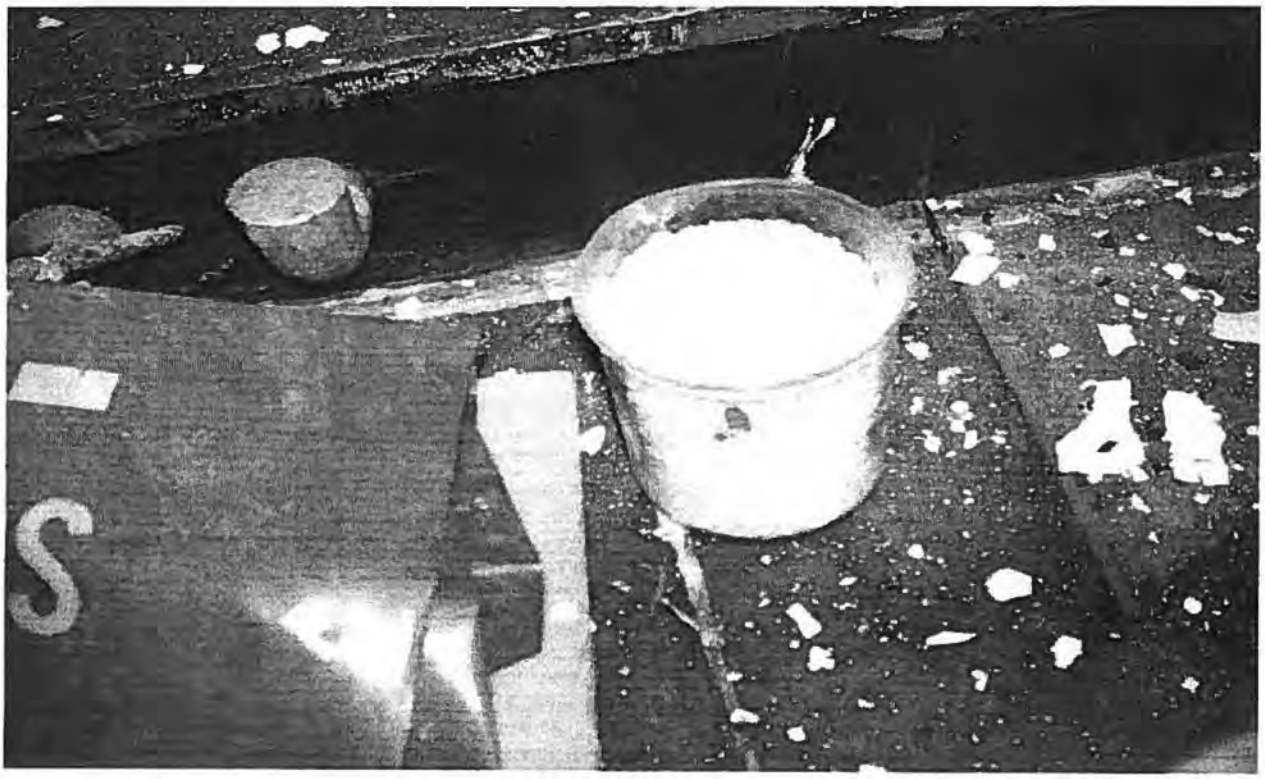



LOW CATHODE LAMP
Pb

CADMIUM
Cd
CADMIUM
Cd
CHROMIUM
Cr
COPPER
Cu
SODIUM
Na
CADMIUM
Cd
MADE IN IRELAND
ZINC
Zn

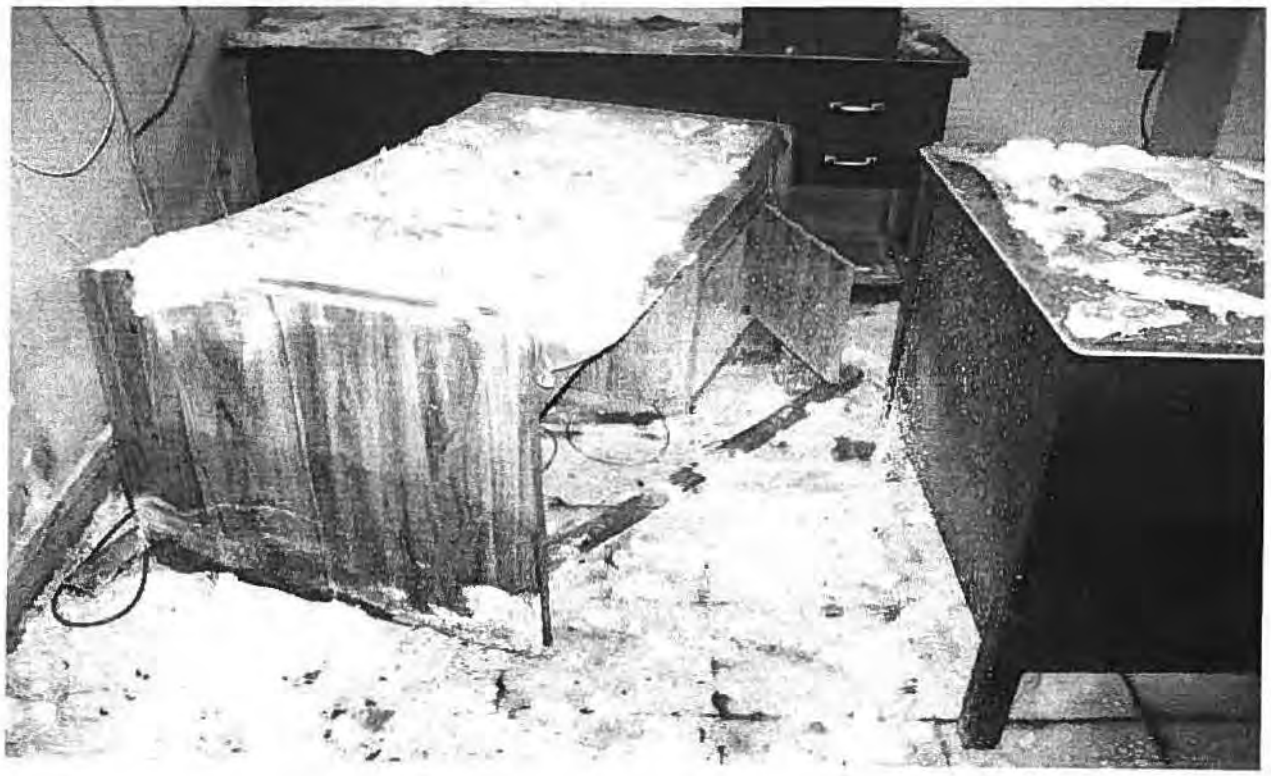
ZINC
Zn
ZINC
Zn
COPPER
Cu
ZINC
Zn
CHROMIUM
Cr

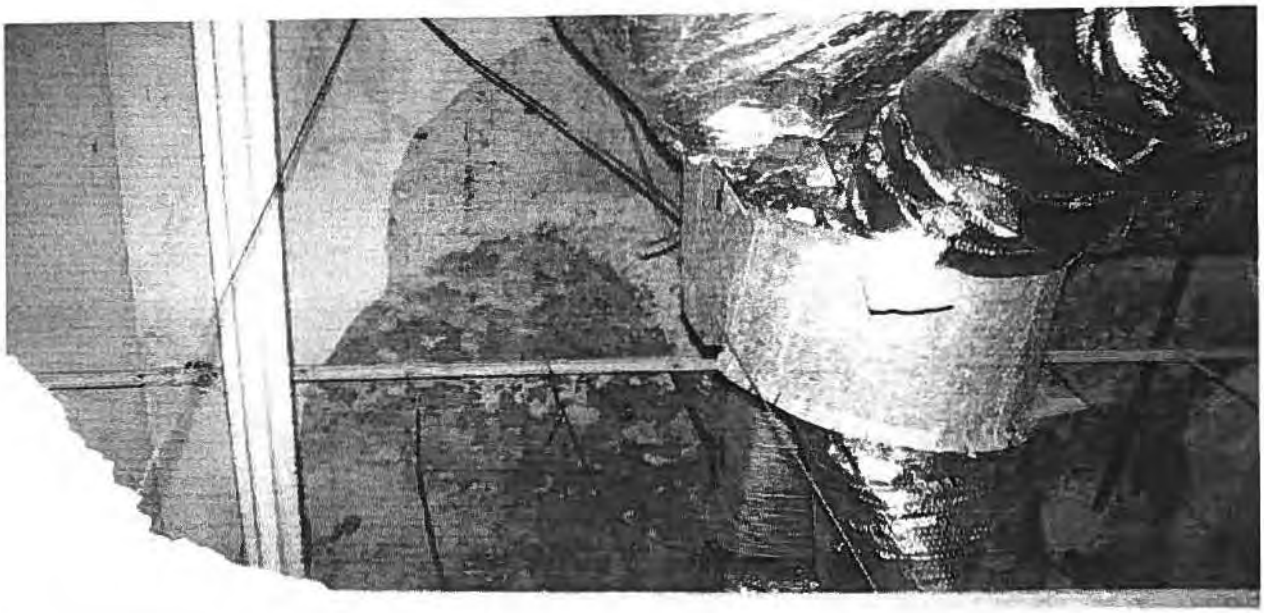

CAUTION:
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
BREATHING ASBESTOS DUST MAY
CAUSE SERIOUS BODILY HARM

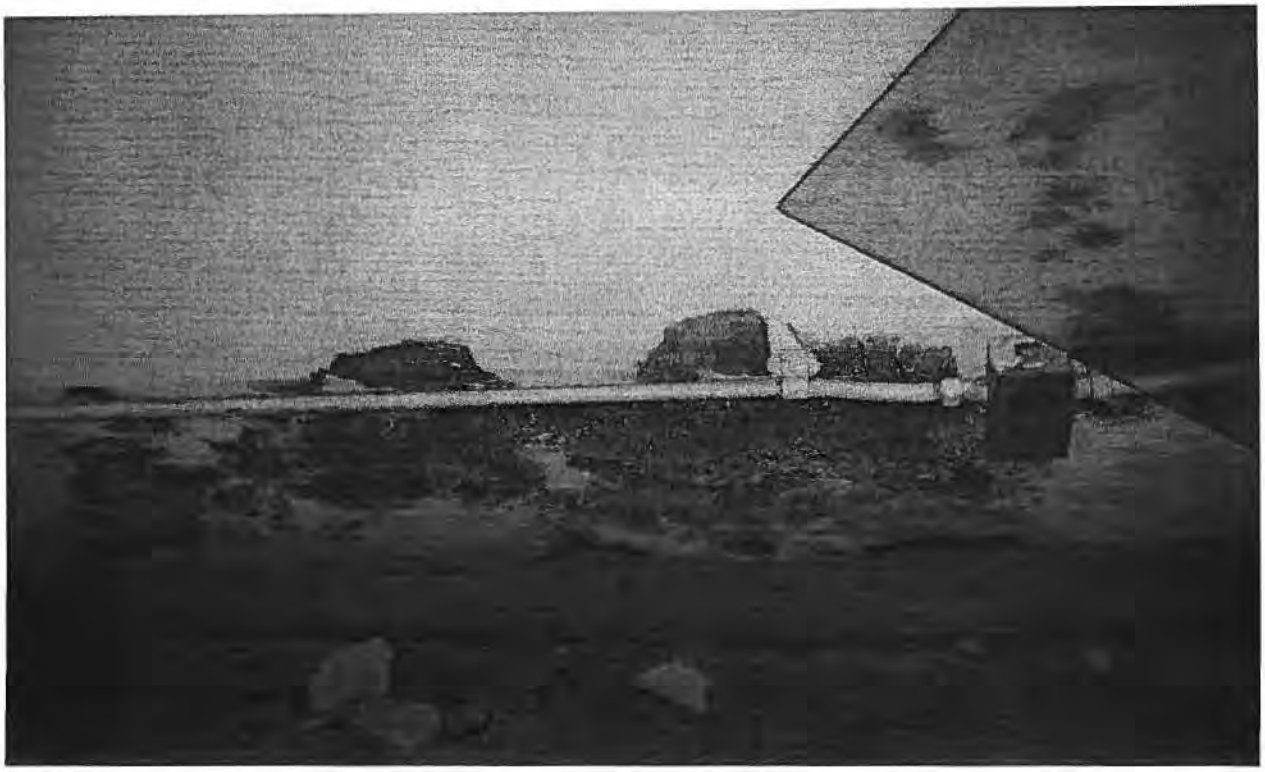


varian techtron
HOLLOW CATHODE LAMP

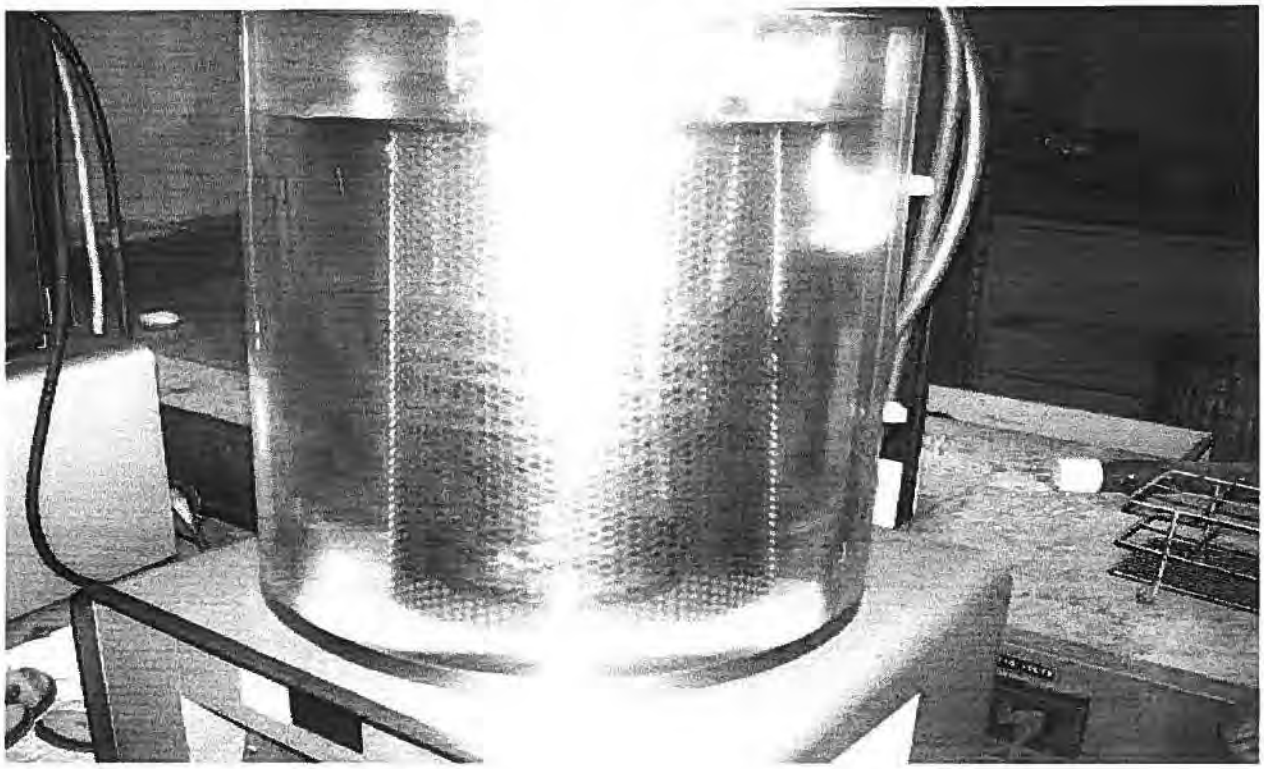
CAUTION
CORROSIVES

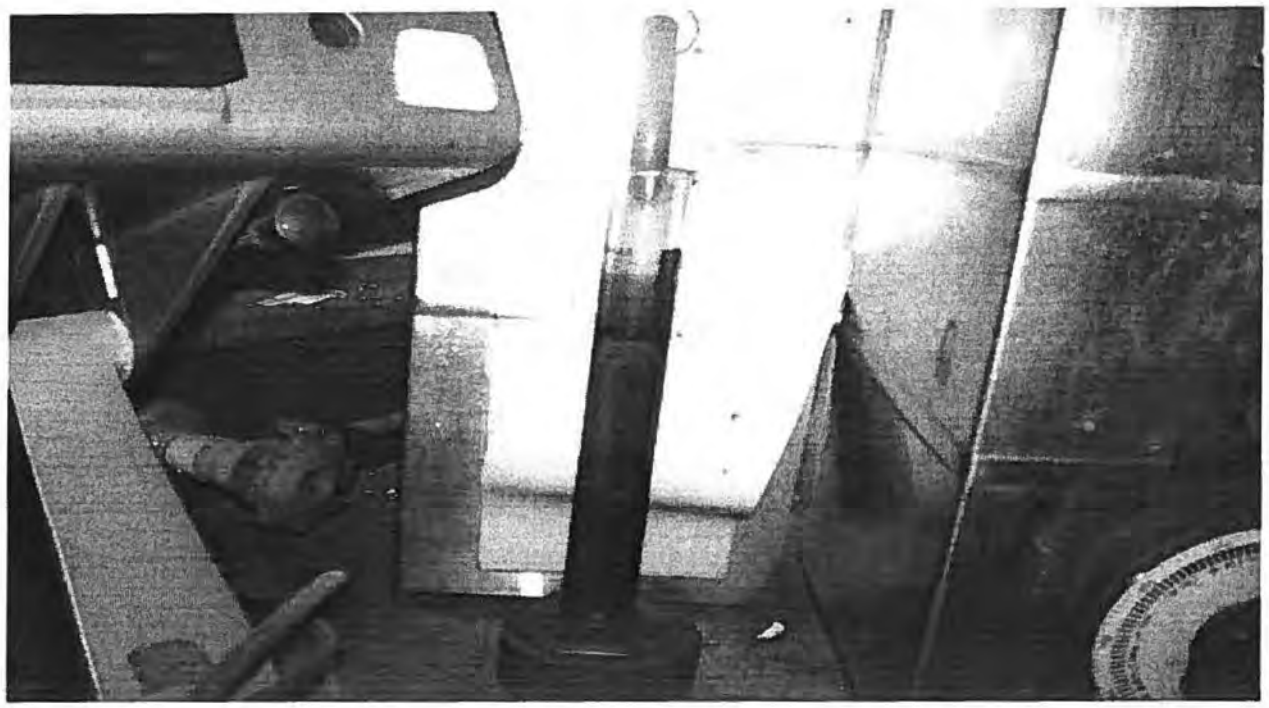




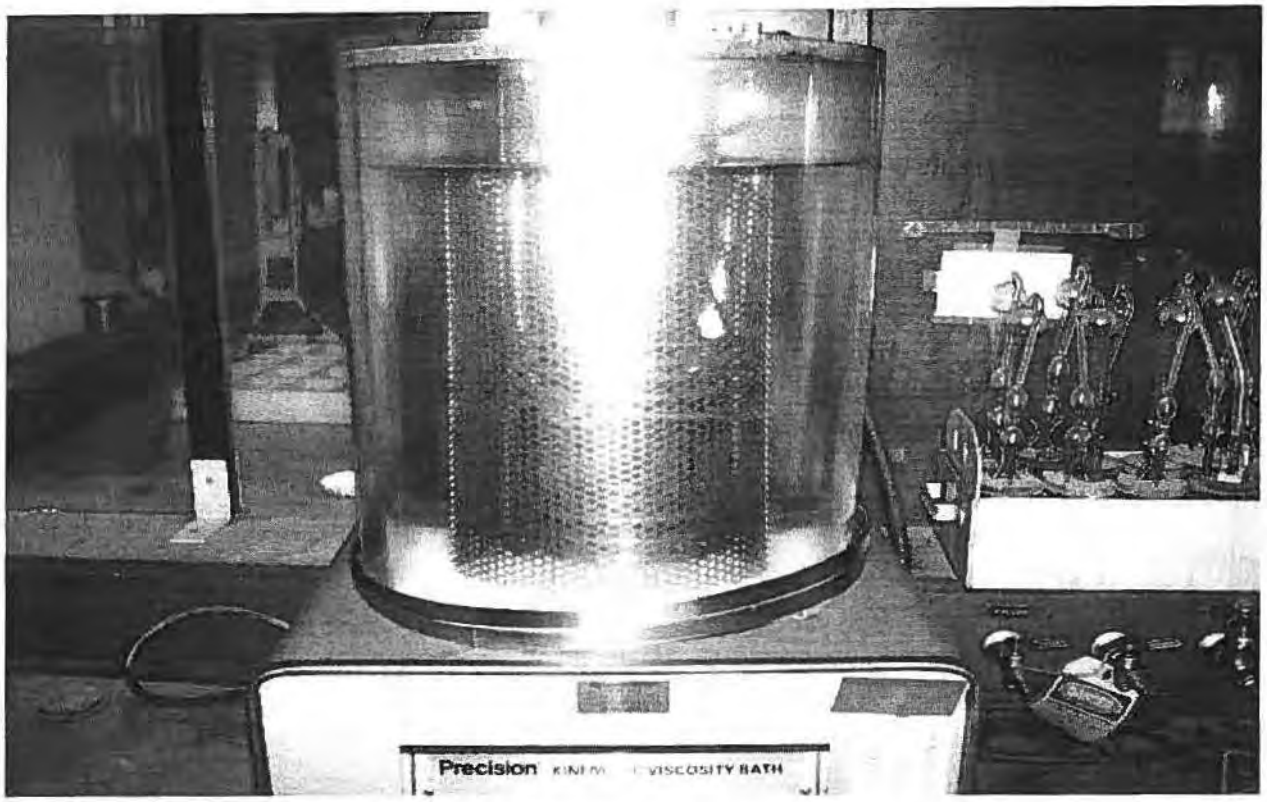


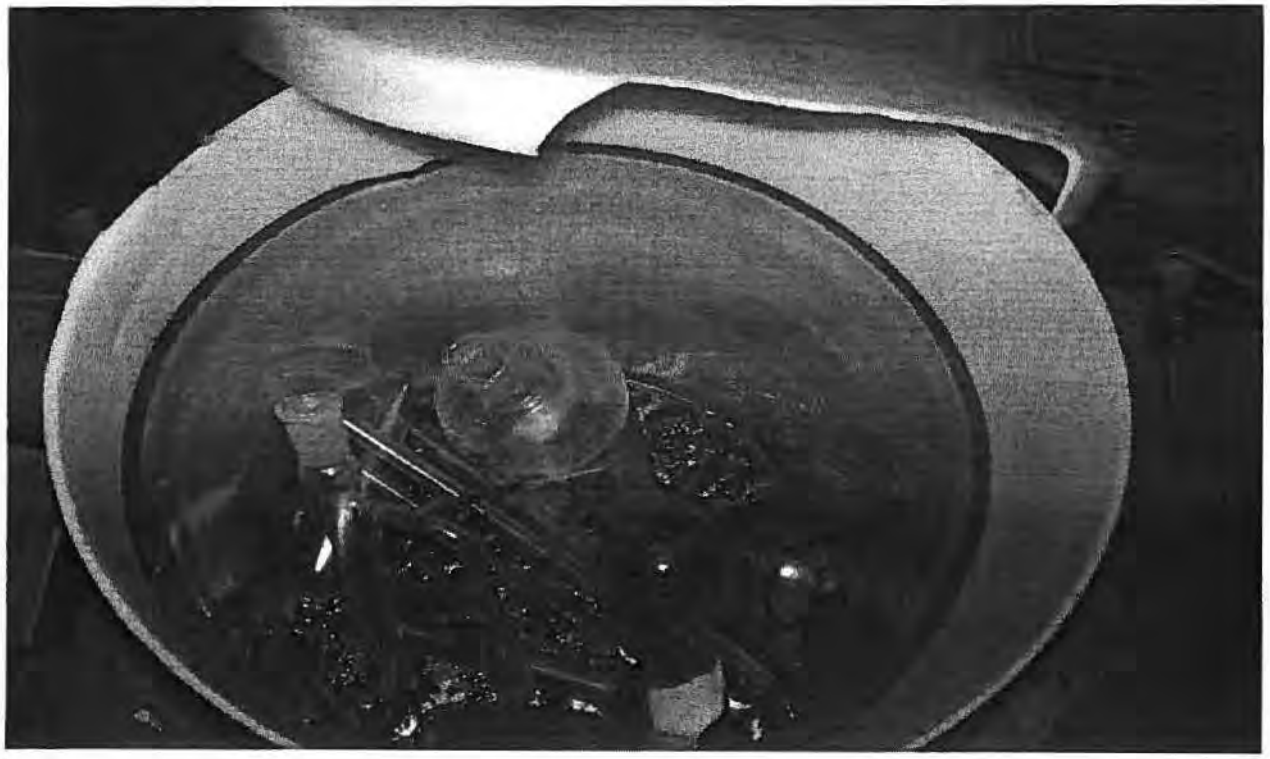
2 0 4

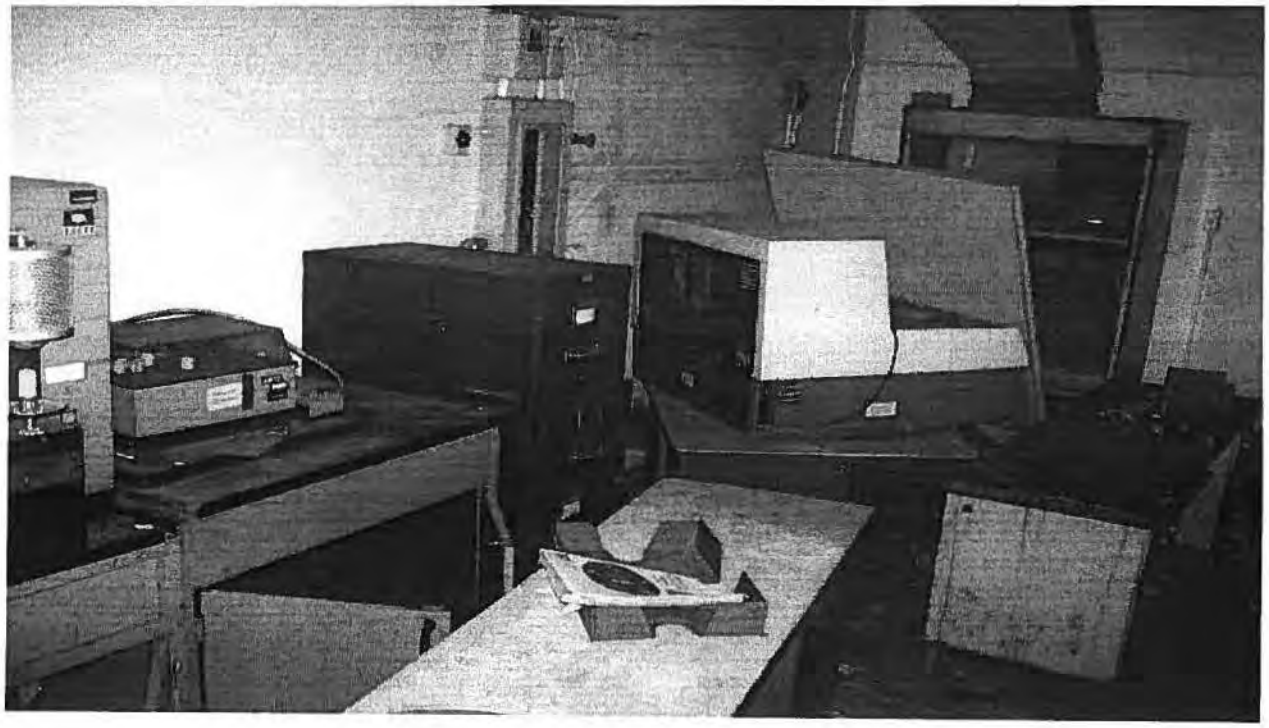


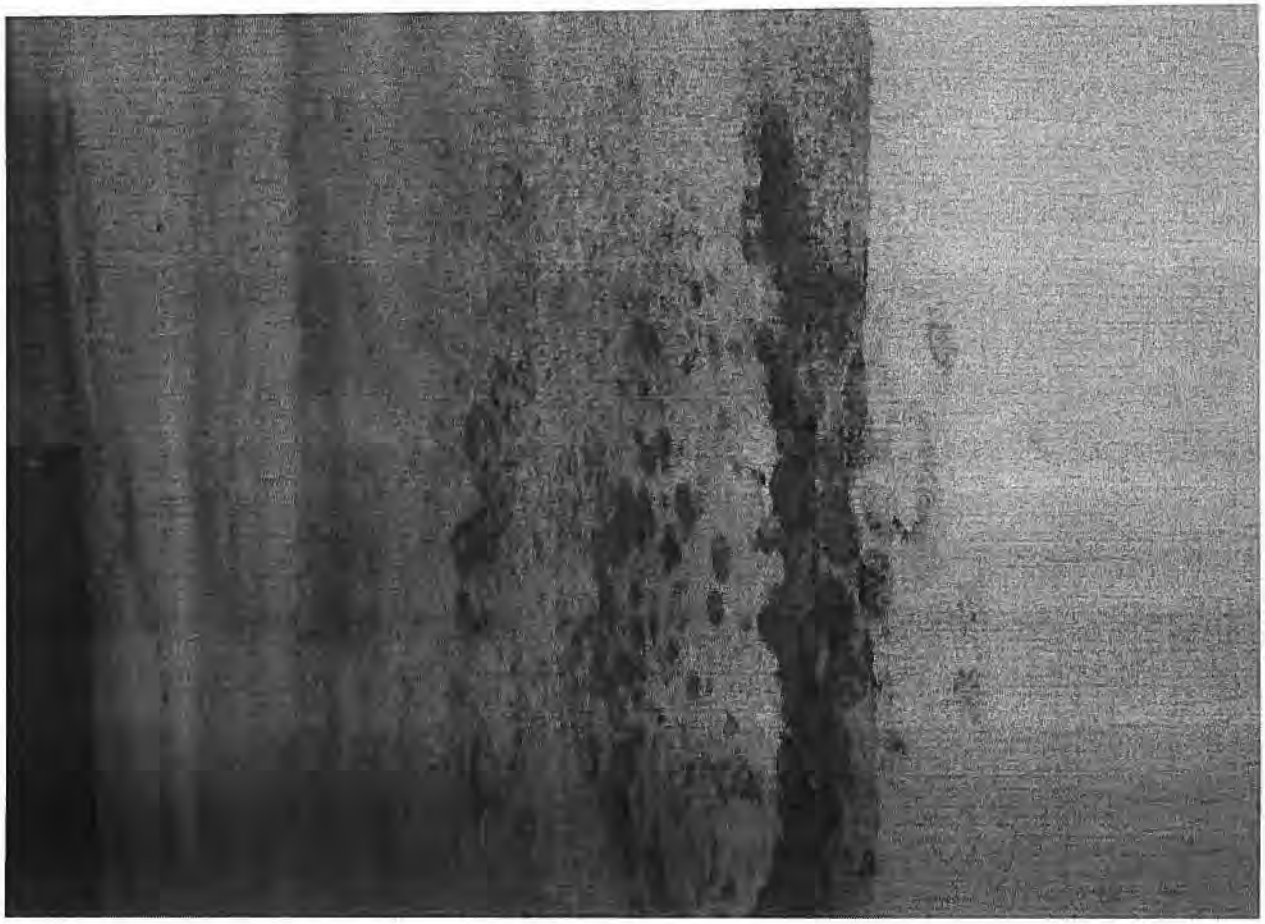


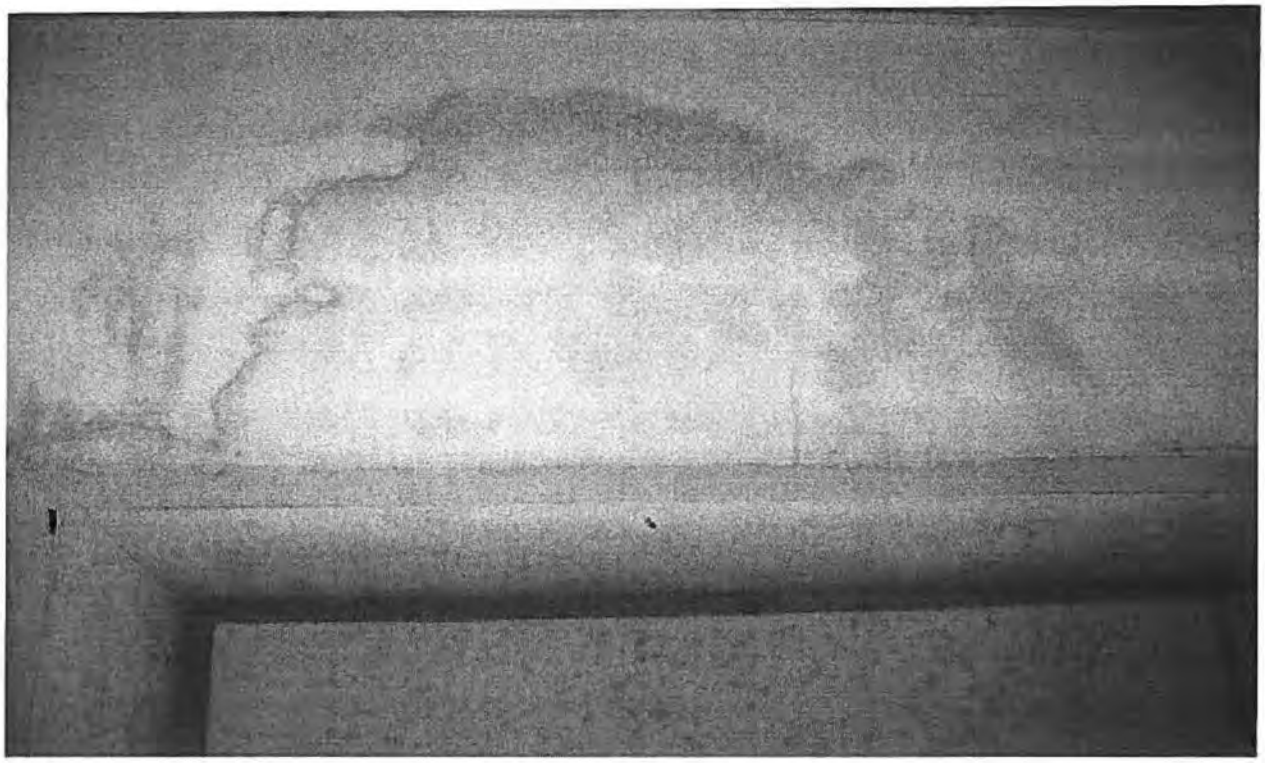
VISCOSITY BATH

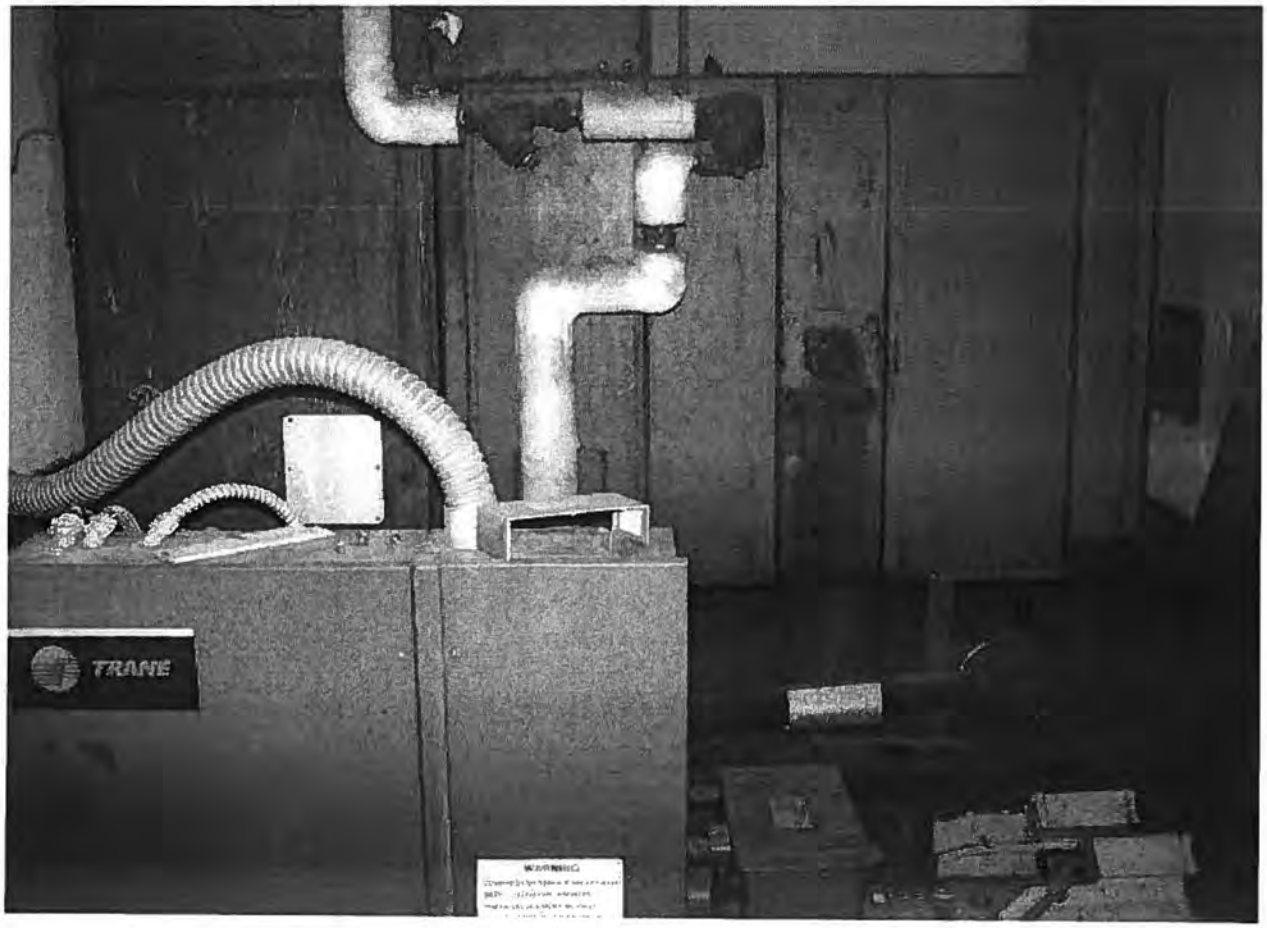

Precision
VISCOSITY BATH

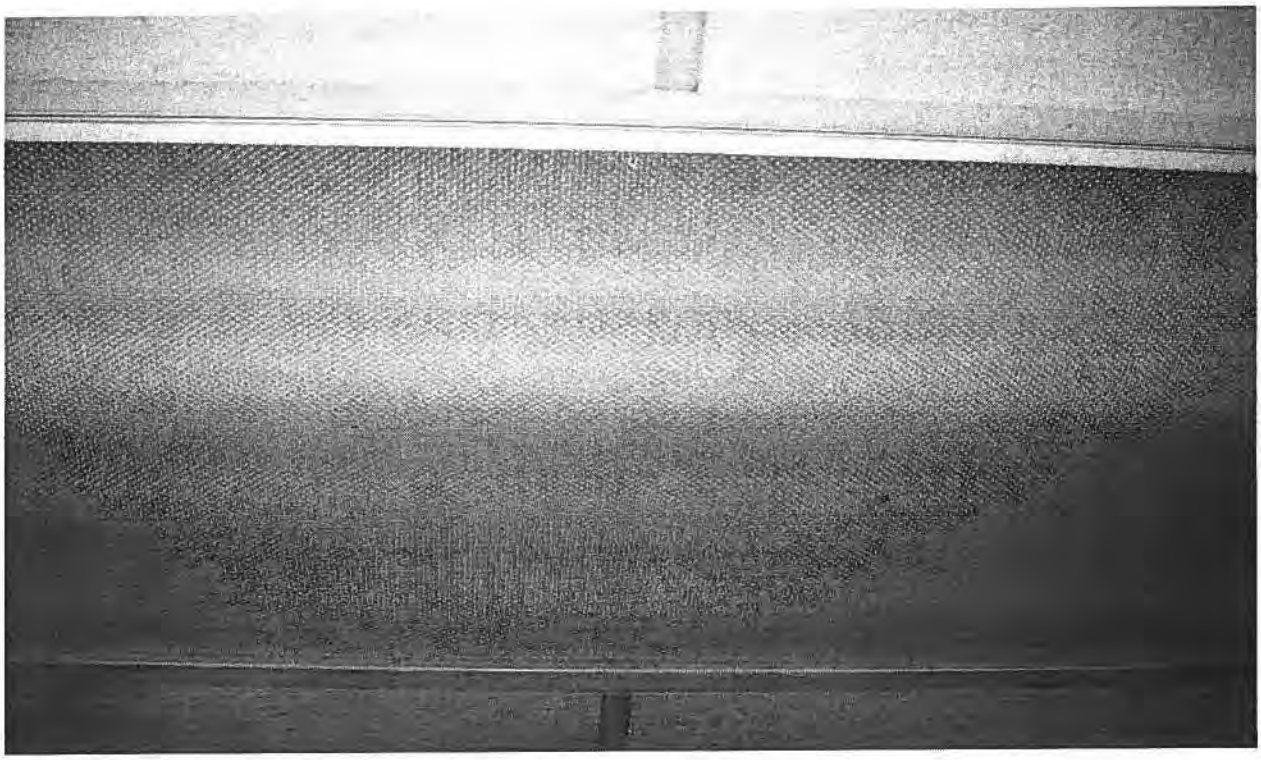


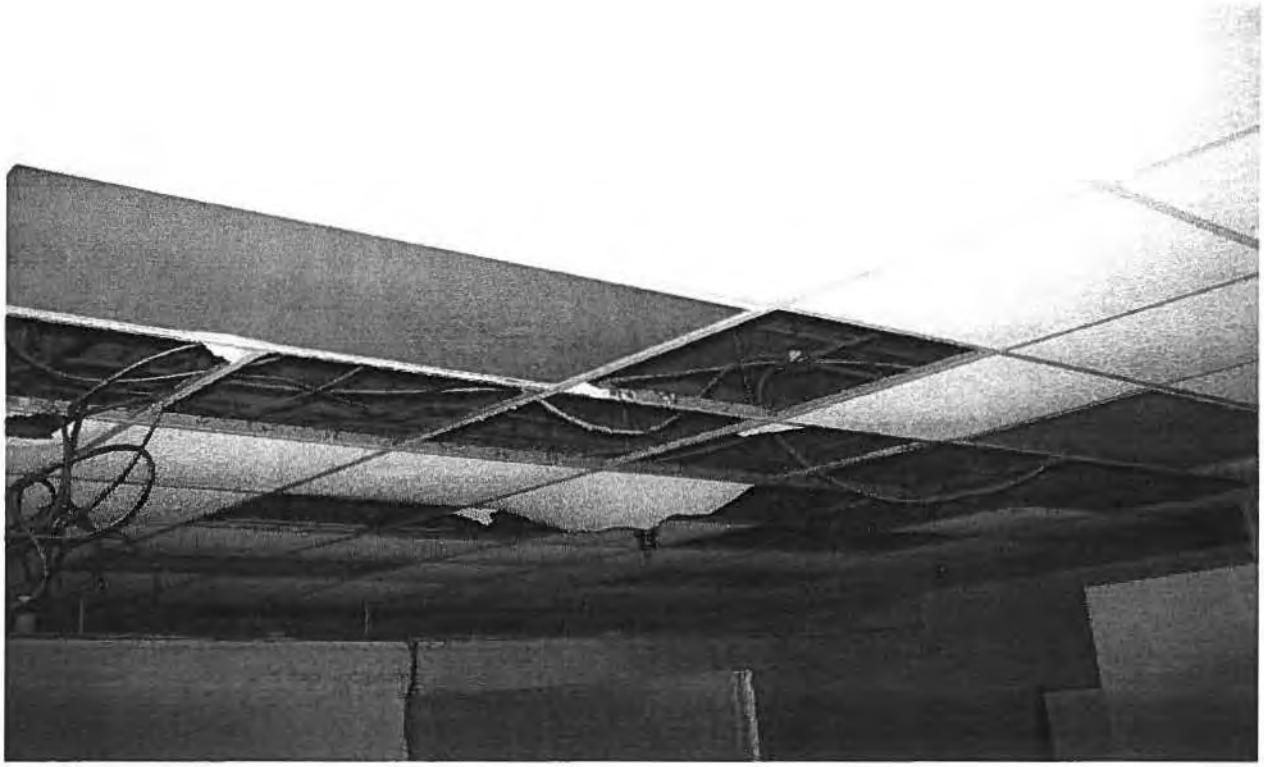


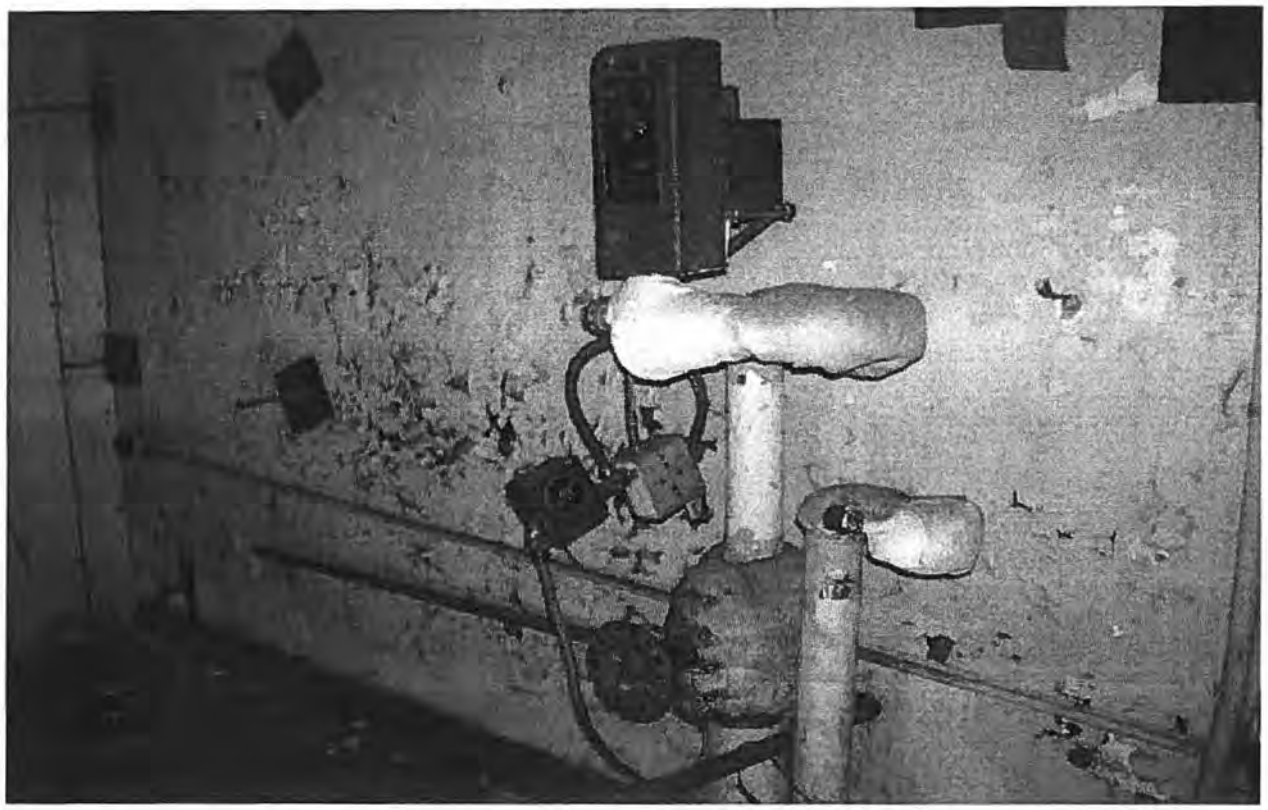




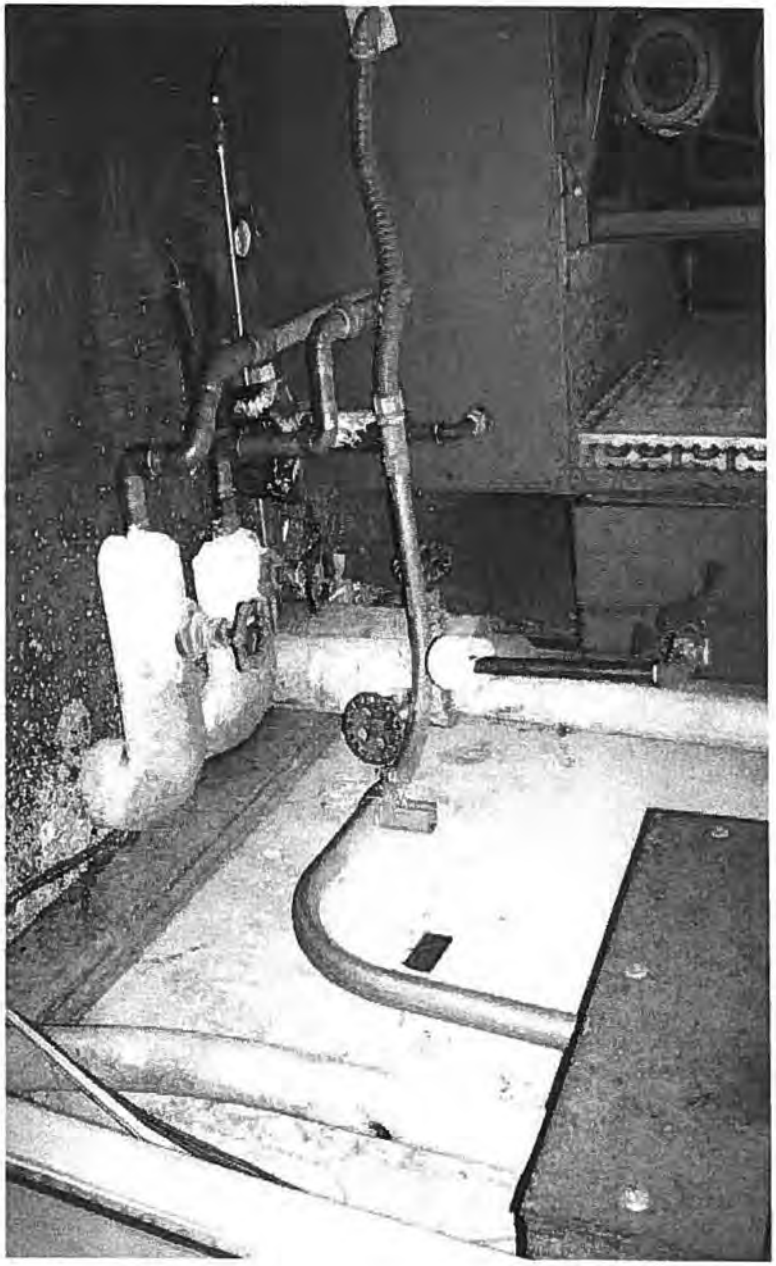

TRANE

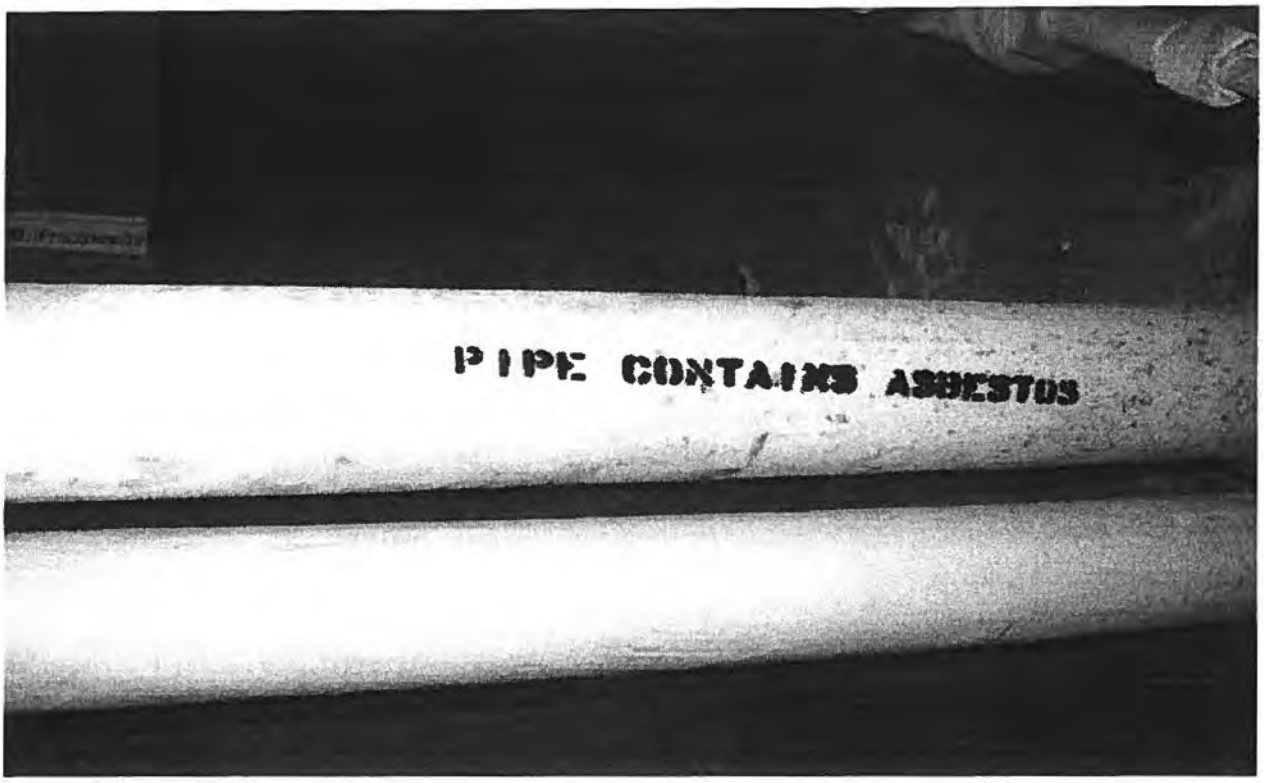
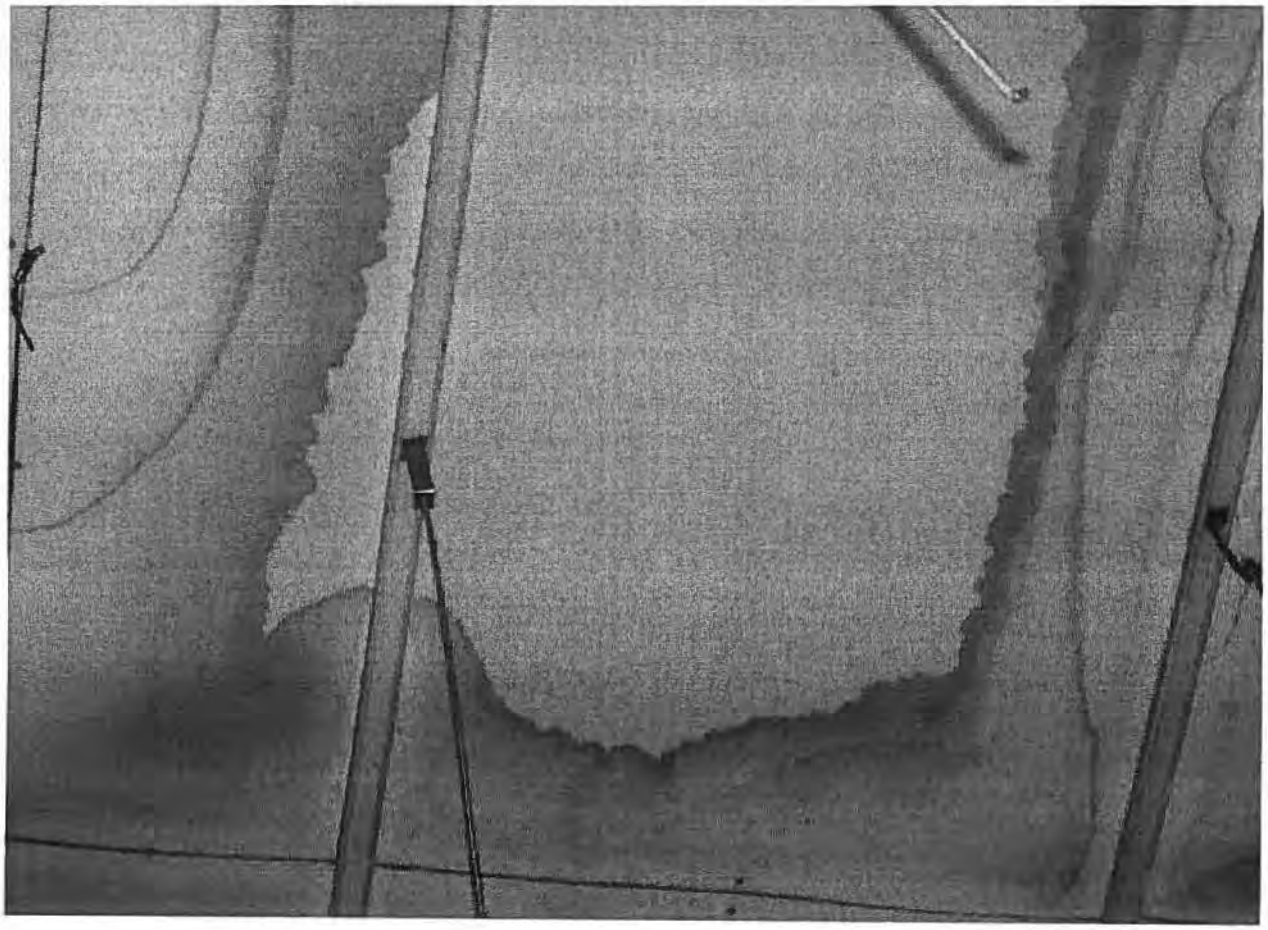






GER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD




PIPE CONTAINS ASBESTOS