

## Standard Operating Procedure - Thin Section Lab

Dec. 2003

### I. PORT CALL

- Cross-over with off-going crew. Read all tech reports and crossover notes. Ask if/when/how counterpart will be available while traveling or at home in case questions arise.
- Assist as needed with on/off loading cores, freight, etc. Get rid of all trash, etc. Make sure the glass disposal boxes are emptied and that waste oil (if any) is disposed of in port if possible.
- Unpack items from the shipment for Thin Section lab. Make sure spare parts are the right ones.
- Begin verifying operation of Thin Section lab preparation equipment (i.e., frosting slides, assuring the plates are flat, etc.) . Familiarize yourself with the Leg Prospectus and ascertain a probable number of Thin Section samples to be analyzed, as well as the type of material expected (i.e., hard rock, clayey material, etc.). Discuss any sampling issues or analysis techniques as necessary with Curator, Staff Scientist, and any interested scientists.
- Make sure supplies are adequate and equipment and instruments are operational and notify Lab Officer of any problems.
- Report to LO/ALO for other port call duties

### II. SITE PREPARATION

### III. ON SITE ACTIVITIES

- Receive core and assist as needed in the core lab
- Prepare and analyze Thin Section samples.
- Understand how the thin Section procedure works, the idea and theory behind it, and be prepared to answer questions or at least point a scientist or tech in the right direction.
- Provide information early in the cruise about how many Thin Section samples the lab can reasonably be expected to handle. **Remember, the core lab is your primary duty and thin section preparation must come secondary to that unless arrangements are made with the Lab Officer to meet special objectives.** Scientists should be made aware of this and that it is not reasonable to expect high resolution on a high recovery Leg.
- Keep Thin Section lab clean, orderly and well-stocked with supplies. Mop if necessary. Remove any cups or dishes promptly.

#### **IV. Equipment Maintenance**

- Maintain the SIMAN inventory sheet. Do physical counts of supplies each cruise and other parts and supplies as time allows.
- If the equipment is not operating properly, learn how to fix it. Use techs and E.T.'s as a resource but you should eventually be the expert in the Thin Section lab, calling only on E.T.'s occasionally to resolve electrical problems.
- Check the flatness of the LP30 plate often.
- Monitor oil levels in vacuum pumps. Refill or change as necessary.
- Put shipping or other important papers in the Leg Notebook. Record and date any maintenance.

#### **V. END OF CRUISE**

- Remove all personal items from drawers, walls, and shelves.
- Clean everything from top to bottom and scrub the floor.
- Empty glass discard box in Paleo lab. Consult LO on how to dispose of glass.
- Clean all cabinets, in particular the chemical and flammable cabinets. Dispose of unlabeled or out of date bottles.

#### **VI. PORT CALL – OFF GOING**

- Find the oncoming Marine Lab Specialist(s) for your lab and cross over. Make sure the technicians that are replacing you are aware of any changes made to the lab, procedures, current equipment status, and port purchases if necessary.
- Attend the port call meeting.
- Unload off going airfreight and frozen shipment, or any freight as required. Load on coming freight if time permits.

#### **On Shore**

- Follow up on all requisitions from the ship or items returned for repair.