## TITLE: Data File Restoration and Verification of System Integrity

## PRINCIPLE:

If a data file gets corrupt or deleted for any reason, there are several methods to restore it. Any time that data files are restored to the Laboratory Information System (LIS), the system integrity must also be verified.

**PERSONNEL:**

###### All Laboratory Staff

## STEPWISE PROCEDURE:

# Restoration of a Corrupt or Deleted Data File

The LIS is backed up to tape each night, using Tivoli Storage Manager, which sends the data to tape backup for storage. In the event of a corrupt or deleted file, the file can be recovered from the tape backup.

1. The Network Engineer will be notified that a file needs to be recovered from tape backup. They will call Soft Support to assist with the recovery. The number is 1-800-763-8522, option 1 for Soft System and Hardware issues.
2. All users will need to logout of LIS immediately so as to not enter new data into the system. Notify labs (main and Yorkville) and Respiratory.
3. Users entering orders into the Hospital Information System (HIS), will be notified that the lab system is down and to follow the downtime procedure for new orders. (Refer to 4840-LIS-308, “Laboratory Information System Downtime Procedure”).
4. Copies of the tapes are available here on-site and also at an off-site storage facility in the event of a complete loss of the tape library here.
5. LIS will restore from the backup tape using the Tivoli Storage Manager.

Verification of Restored Data Files

System integrity must be verified after restoration of any data file.

1. When the file is restored from tape backup, the Network Engineer checks the file name and date, and also checks the file size to ensure a full restore.
2. After data files are restored and file size is verified, the following will be checked in LIS before letting the users back on:
   1. Sample results from before the restore time will be compared with LIS, using instrument printouts from the Hematology and Chemical analyzers.
   2. Print several LIS patients’ charts from the last several days. Compare these with HIS for completeness.
   3. Compare a representative number of patient orders in both HIS and LIS.
   4. Compare billing with a few patient tests to verify charges.
3. If the above is acceptable, the laboratories (main and Yorkville) and Respiratory will be notified that they may access LIS.
4. HIS users will be notified that the lab system is back up and to discontinue downtime procedure.