Physical pooling of stacked volumes is identified through pool numbers, as shown in
Figure 2-5.
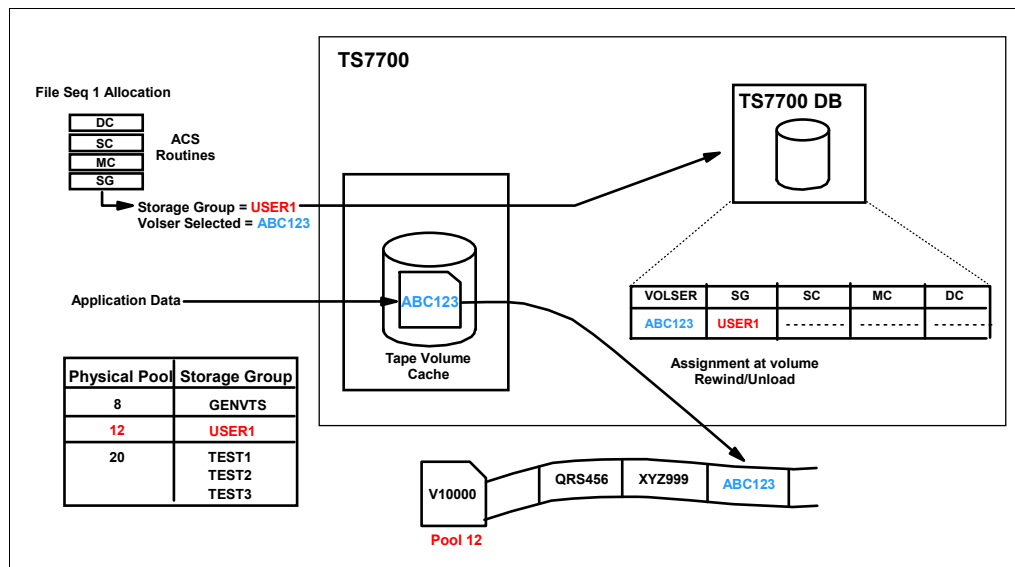

Figure 2-5   TS7700T Logical volume allocation to specific physical volume pool flow

Through the MI, you assign which primary pool is used for a workload within the SG
attributes. During a scratch mount, a logical volume is assigned to a selected SG and the
assigned pool for that SG is targeted. In addition, MC can be used to define a secondary pool
when two copies on physical tape are required.

Physical VOLSER ranges can be defined to target a specific home pool at insert time.
Changing the home pool of a range has no effect on volumes that are in the library. For pools
with borrow/return enabled, target the common pool 00. For pools where borrow/return is
disabled, set up the range table to include volumes that specifically target that pool. Each pool
that contains any amount of active data must always have at least two scratch stacked
physical volumes to prevent low scratch warnings.

> **Tip:** Primary Pool 01 is the default private pool for TS7700T stacked volumes.

Borrow and return: Physical Scratch Management

By using the concept of borrowing and returning, physical scratch distribution can be
automatically addressed.

With borrowing, stacked volumes can move from pool to pool based on each pool's assigned
media type and media needs. When all borrow/return enabled pools with active data contain
at least two scratch stacked volumes, any excess physical scratch is returned to the common
pool 00. You need at least two empty stacked volumes in pool 00 and any pool that contains
active data. If borrow/return is not enabled for a specific pool, you must manage its scratch by
using the physical VOLSER ranges and inserting more tapes when counts go below three.

One physical pool with an out-of-stacked volume condition results in an out-of-stacked
volume condition to the entire TS7700T cluster. Therefore, it is necessary to monitor all active
pools.

> **Note:** Pools that feature borrow/return enabled and contain no active data eventually
> return all scratch volumes to the common scratch pool after 48 - 72 hours of inactivity.