Audit Summary

Auditors: Dalton, Will, Sanjay

We broke the system down into two parts to audit separately: epoch-level mechanics and request-level mechanics. Dalton audited epoch-level mechanics and Will audited request-level mechanics. Sanjay did a system-wide audit.

Issue Count

Contract	🛑	🟡	🟢	Total
All	0	1	3	4
SeniorPool.sol	0	1	3	4

Epoch-level mechanics summary

We attacked the code from several angles.

- Identified as many invariants as we could and analyzed them to determine how the could be violated. We couldn't find any invariant violations (see `invariant-analysis.md`). Future work will be to plug the invariants into an analysis tool like Echidna.
- Checked that every code path that *should* trigger epoch checkpointing *does* in fact trigger epoch checkpointing (see `verify-no-missed-checkpointing.md`).
- Went through the pre-audit and audit checklists (see `pre-audit-checklist.md`).
- Analyzed integer rounding in the epoch liquidation math and concluded that epoch variables like `usdcAllocated`, `fiduLiquidated`, etc. aren't adversely affected (see`rounding-errors-from-integerd-division.md`).
- Thought through what would happen if ERC20's were sent directly to the senior pool (see `sending-erc20s-directly-to-pool.md`).

Request-level mechanics summary

TODO(Will)