



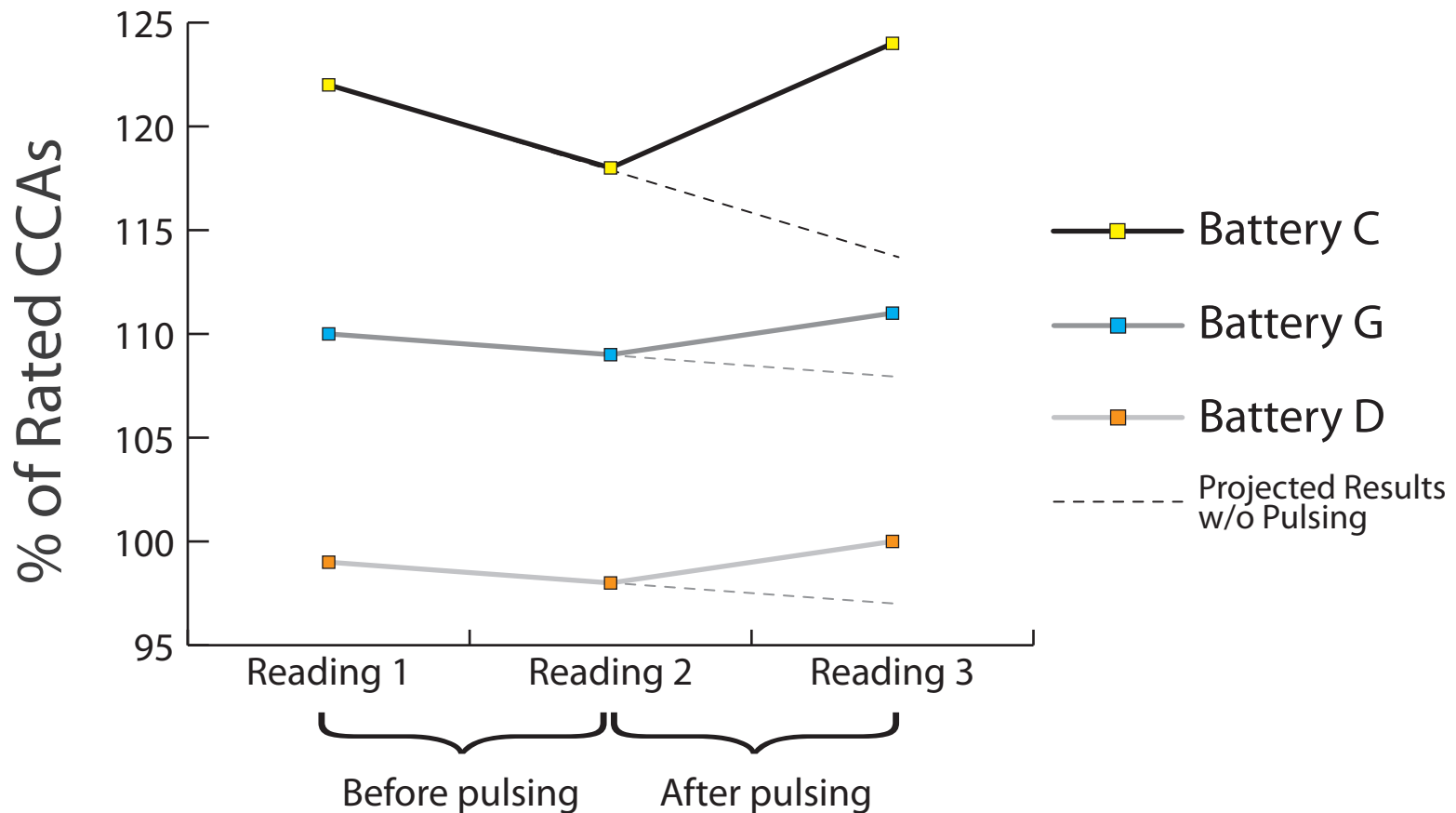
# Demonstration Results

September 10, 2013

On Sept. 6, 2013, EarthSafe Batteries installed a PulseTech Pro-12 maintaining device in U-Haul's shop to demonstrate the effectiveness of keeping new and recharged batteries maintained with the patented pulse technology.



Batteries C, D, and G, were used as a control group and left off any pulsing device for the first and second readings. Then they were placed on the Pro-12 along with the others for a day and the readings were taken a third time.

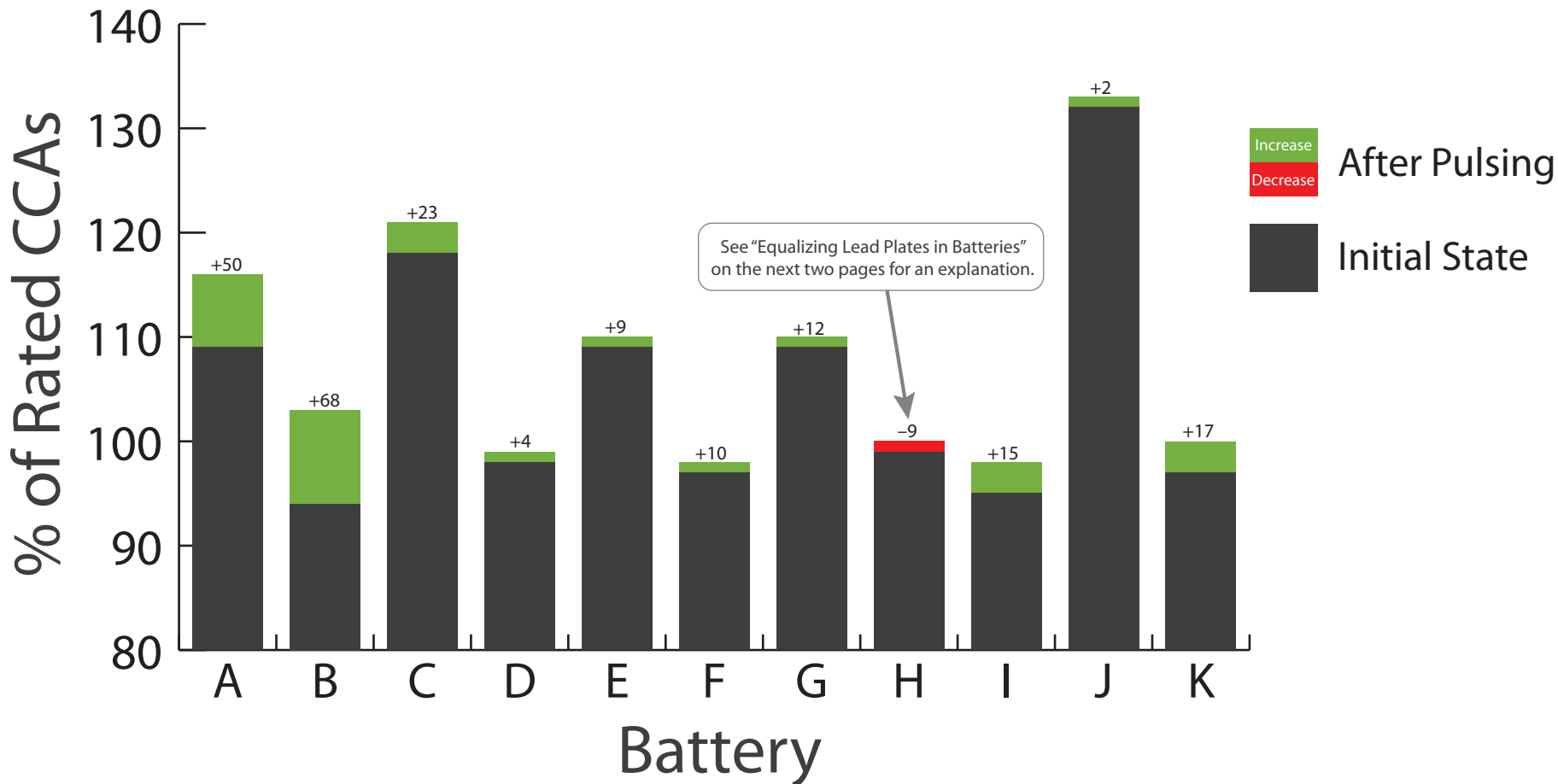




# Demonstration Results

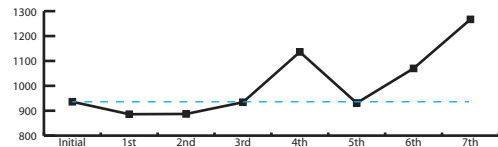
September 10, 2013

On Sept. 6, 2013, EarthSafe Batteries installed a PulseTech Pro-12 maintaining device in U-Haul's shop to demonstrate the effectiveness of keeping new and recharged batteries maintained with the patented pulse technology.

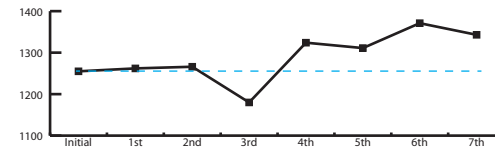


# Equalizing Lead Plates in Batteries

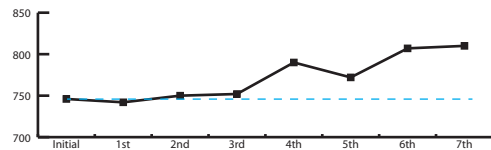
The following are the results of a shop demonstration performed for UTA. They show change in CCAs of batteries taken over 7 different readings within a three week period. It can be noted that frequently, CCAs show a temporary decrease before eventually showing an improvement. The dotted line shows where the battery's readings began. Please see next page for an explanation.



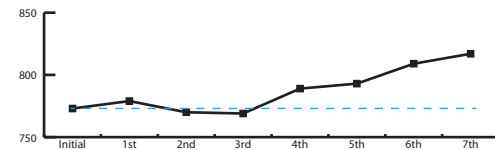
A



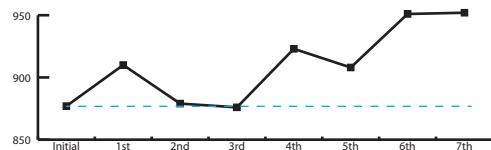
B



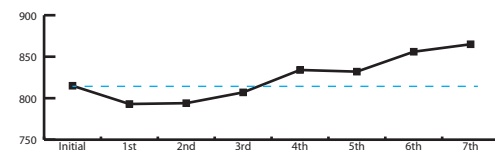
C



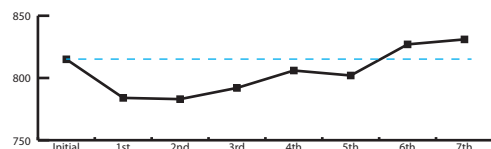
D



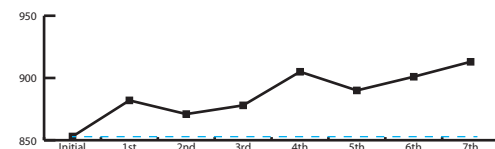
E



F



G



H

# Notes to Equalizing Lead Plates in Batteries

In traditional battery charging, the electricity introduced into the battery flows to free space on the battery's lead plates. As the plates become covered with sulfation, they have less and less space to store energy. The sulfation grows and causes the battery to resist accepting energy until it can't perform. It becomes a "dead battery."

PulseTech's patented waveform works differently. When introduced into the battery, it flows directly to the sulfation, not the plates. It keeps the sulfation particles from sticking to the plates and hardening. The pulse targets the plate with the worst sulfation first. This equalizes the plates and they begin to accept charging evenly. In the initial stages of this process, CCA readings can sometimes drop briefly. Once the plates equalize, the CCAs begin to rise again. This temporary drop usually manifests when "improving" a good or charged battery, not "recovering" a poor or uncharged one. It is simply part of the healing process.

Pulsing not only equalizes plates within the battery, but batteries within a pack of batteries. For example, if a truck runs three batteries and one goes down, standard procedure is to replace all three batteries. With pulse technology, if only the bad battery is replaced and an onboard desulfator is installed at the same time, over time all the batteries equalize upward and then maintain. This is a game changer in battery maintenance.

When the battery's plates are desulfated using pulse technology, energy introduced into the battery is accepted because the soft sulfation particles can dissolve completely back into the electrolyte as it is supposed to and the plates equalize as much as possible.

**Prepared by EarthSafe Batteries, Inc. using equipment supplied by PulseTech Products and batteries from the Utah Transit Authority.**