Introduction: This notice is to alert users of the NCI 900 Series Interface of a potential problem confirmed in the use of the above referenced product. This advisory affects you only if you are using NCI 900 Series Interfaces connected to acquisition servers directly through the network. This problem does not occur if the NCI interfaces are connected to acquisition servers through terminal servers, serial ports, or by GPIB. This problem does not occur with the older Model 600 LINK Series or Model 900 Series Interfaces.

Advisory Number: PNADV15

Publication Date: January 18, 1999

Product Name: Perkin Elmer NCI 900 Series Interfaces, firmware versions 3.0 and 3.1

Problem: There are several scenarios. Each leads to different results.

Scenario 1:

It is possible to lose data buffered in NCI interfaces if runs continue to be collected after sequences have completed. This can occur under the following set of conditions:

1. NCI interfaces are connected to the acquisition server directly through the network by assigning TCP/IP addressing information to them AND
2. Acquisition sequences have been collected through completion AND
3. Runs continue to be collected and stored in the interfaces using the last active methods in the sequences AND
4. The network connection to the interfaces is interrupted during the acquisition of post-sequence runs (by some mechanism such as unplugging their cables from the network or rebooting the acquisition server) AND
5. The network connection is subsequently restored, THEN
6. The NCI interfaces will become DETACHED.

After a 2.5 hour timeout period, the interfaces can be reattached. However, if the interfaces are power cycled before that period expires, any data buffered in them will be lost.
Scenario 2:

It is possible for NCI interfaces to show a status of *DETACHED* with Turbochrom v6.1.x software when they are, in fact, *NOT DETACHED*. This can occur under the following set of conditions:

1. NCI interfaces are connected to the acquisition server directly through the network by assigning TCP/IP addressing information to them AND
2. The interfaces are in the *READY* state as a result of downloading methods AND
3. The network connection to the interfaces is interrupted (by some mechanism such as unplugging their cables from the network or rebooting the acquisition server) AND
4. The network connection is subsequently restored THEN
5. The NCI interfaces will show as *DETACHED* on Turbochrom status screens when the interfaces are, in fact, *READY*.

That the interfaces are *READY* can be verified by starting the next run. The interfaces will reattach, and upon completion of the runs they will show accurate status on the Turbochrom status screens.

Scenario 3:

In cases where NCI interfaces are attached directly to the network and do not have methods downloaded to them (are not initialized), it is necessary to power-cycle each interface before it can be reattached after a network interrupt event.

**Problem Detection:** This problem can be detected by observing the Turbochrom status screen for the NCI interfaces connected directly to the network. These interfaces can show as *DETACHED* after a network interruption and cannot be reattached from the Turbochrom GUI.

**Additional Information:**

When all replicates for a given calibration level have been excluded in Method Editor, Fit Analysis (Calplot) will show a different calibration curve from that in Method Editor, since Fit Analysis does not read the stored average values in this instance. However, if all replicates are deleted, Fit Analysis will use the stored average values and indicate the same (misleading) calibration as Method Editor.

You may remove all calibration data from a method by running the command line:

```
METHEDIT /c /[drive:\path\method name]
```

where [drive:\path\method name] is the fully qualified file name of the method.

**Problem Avoidance:**

Delete the entire calibration level to be excluded via the Calibration Table. Do not use the Exclude or Delete feature in Method Editor to remove all replicates of a calibration level. *Exclude or Delete may be used to remove all but the last replicate.*
Problem Avoidance:

**Scenario 1:** Do not collect data using the last active method in a sequence after the sequence has completed. Use the *Clear Setup* instead of *Use last active method from the sequence* option from the Post Sequence Options tab to ensure data cannot be collected after the completion of the sequence.

**All scenarios:** Ensure uninterrupted network service to NCI interfaces directly connected to the network. If that cannot be done, connect the NCI interfaces to acquisition servers via GPIB, terminal server, or serial port connection.

**PE Actions:** Software Investigation Request (SIR) A45LAL8D191321 was logged and Program Change Request (PCR) 4740DRM has been assigned to correct this problem. A firmware correction to the NCI interface is being developed and will be made available to all NCI owners of record. The correction is expected to take 3 to 4 weeks from the date of this advisory. The correction will be made available to NCI owners via the Perkin Elmer web site.

**Customer Actions:** Be aware that this problem can occur and take actions described above to avoid it. A firmware correction is expected to be available about 30 days from the date of this advisory. Users may download the flash correction for this problem from the Chromatography US Service and Support Technical Services web site (http://204.255.73.5/chrom/tstree.nsf/pubindex). For additional information contact Chromatography Data System Support at 1-800-762-4000 in the US or your local PerkinElmer service office outside of the US.
Information in this document and any software that may accompany this document (referred to as a Software Advisory) is provided “As Is” without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability and/or fitness for a particular purpose. The user assumes the entire risk as to the accuracy and use of this information.

This Advisory may be copied and distributed subject to the following conditions:
1) All text must be copied without modification and all pages must be included; 2) If software is included, all files on the disk must be copied without modification; 3) All components of the advisory must be distributed together; and 4) this Advisory may not be distributed for profit.

Copyright © 1999 Perkin Elmer Corp, All rights reserved.