Dr. Barry K. Logan  
Washington State Toxicologist  
Park 90/5 Suite 360  
2203 Airport Way South  
Seattle, Washington 98134-2027

Dear Dr. Logan,

The Washington State Patrol Breath Alcohol Test Section has recently obtained a new version of software for the BAC Datamaster. This software will be installed in the BAC Datamaster instruments used throughout the state of Washington. This new version of software will replace that which is currently approved and described in my correspondence dated November 9, 1995 and your correspondence of approval dated November 9, 1995.

The new version of software is identified as version number 76016-003 and dated 10/24/97. The version number and date will be displayed on all printout documents. The computer file name identifying the new software is 102497.BIN. This version of software has the following features that are different from the previous version:

1. Duplicate samples outside the WAC requirement of ±10% of the mean will be assigned error code 20 in the database.
2. There is a 1/4 second delay between the time when the simulator valve opens and the simulator pump is turned on.
3. When an "INVALID SAMPLE" occurs, the test is aborted immediately and the message displayed.
4. The FILTER ERROR algorithm is refined.
5. There will be one minute of periodic beeping on error messages (with the exception of TEMPERATURE HIGH and TEMPERATURE LOW).
6. Only acceptable characters for the driver's license field are identified and allowed.
7. A ten second purge following the occurrence of INVALID SAMPLE is added.
8. The delay between sample acceptance and closing of the five-way valve was removed to avoid losing or changing the contents of the sample chamber.
9. The software contains the capability for computing confidence intervals but is not employed.
10. Printer driver routines are added to allow for the use of any printer.
11. Revisions are incorporated that allow compatibility with all modems provided by National Patent Analytical Systems, Inc.
12. The sample cell purge routine in the F1/F2 mode uses the default setting of zero.
13. The INVALID SAMPLE error requires a negative slope consisting of four sequential counts (one full second) to activate.
14. The chopper motor is allowed a full ten seconds to come up to speed.
15. The printout document will note software version 76016-003 (10/24/97) with the "003" recorded in the database as well.
16. When error codes (SYSTEM WON'T ZERO, CALIBRATION ERROR, RADIO INTERFERENCE, AND AMBIENT FAIL) occur the data entered is retained and available for the next test.
17. The year for the test date and the date of birth is retained to four digits.
18. A Supervisor Default Mode is retained in the F1/F2 system that sets keyboard off, data collection off, and printer off.
19. When INVALID SAMPLE occurs on only one exhalation, the number "1" will appear in the breath test attempts field.
20. Date checking occurs on date of birth data entry to ensure a valid date.

Valid performance of this software will be ensured through instrumental compliance with the Quality Assurance Procedure and the standards associated with a field evidential test as outlined in the Washington Administrative Code (WAC 448-13).

I am requesting your approval of this new BAC Datamaster software version 76016-003 10/24/97.

Sincerely,

CHIEF ANNETTE SANDBERG

Sgt. Rod G. Gullberg
Breath Alcohol Test Section

RGG:rg