

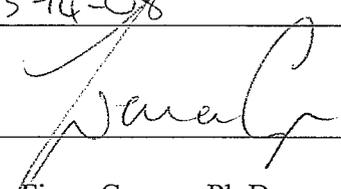
TRAINING OUTLINE

for

BAC DATAMASTER

SIMULATOR SOLUTION CHANGER

Date Approved: 3-14-08

Approved By: 

Fiona Couper, Ph.D.
Washington State Toxicologist

Prepared By

Washington State Patrol Breath Test Program

LESSON PLAN

WASHINGTON STATE PATROL IMPAIRED DRIVING SECTION BREATH TEST PROGRAM

DATAMASTER SOLUTION CHANGER BASIC INSTRUCTION

February 2007

To be presented in 4 hours

INSTRUCTIONAL OBJECTIVES

1. To acquaint the student with the operation of the Breath Test Section of the Washington State Patrol.
2. To enable the student to perform external standard solution changes.
3. The student will demonstrate his/her ability to change BAC Datamaster external standard solutions using correct procedure.
4. The student will be trained to record and retain the proper records
5. The student will successfully complete a written exam.

REFERENCE MATERIALS

1. **Breath Test Program Policy and Procedure Manual.**
2. **Title 448 W.A.C.**
3. **Operator Refresher Outline.**

TRAINING AIDS

1. **Black/White board.**
2. **Datamaster instrument.**
3. **Guth Simulators.**
4. **Handouts and supplies.**
5. **Plastic solution bottle with tape and label.**

WRITTEN AND PRACTICAL EXAMINATIONS

1. **Final written exam covering lecture material - must score 80%.**
2. **Laboratory practical examination - must demonstrate proficiency in solution change procedure.**

I. INTRODUCTION

- A. Overview of Breath Test Program and the Solution Changer's role.

II. OPERATOR REFRESHER REVIEW

- A. Review basic principles of instrument operation

III. LEGAL CONSIDERATIONS

- A. Provide copies and review WAC rules that relate to simulator solution changing

IV. SCIENTIFIC PRINCIPLES THAT APPLY TO THE DATAMASTER

- A. Infra-red Spectroscopy.
 - 1. Beer's Law.
- B. Henry's Law.
 - 1. Volume not critical but temperature is.

V. THE DATAMASTER PROTOCOL

- A. Sample acceptance parameters.
- B. Blank tests.
- C. Internal and external standards.
- D. Two samples.
 - 1. +/- 10% of the mean.
- E. Printed Evidence Document.

VI. SIMULATOR

- A. Nomenclature.
- B. Thermometer.
- C. Solution preparation, testing and certification.
- D. We are not saving simulator solutions - departmental policy, case law.
- E. Simulator Solution Changing Procedure.
 - 1. Review in detail the protocol from Policy/Procedure Manual
 - 2. Solution value will be near 0.080 g/210L
 - 3. Review in detail how to manually set the solution default value through the Set/Advance keys
 - 4. Review the F1/F2 functions in detail
- F. Demonstrate changing solution.
 - 1. Clean and dry simulator elements and jar.
 - 2. Check evidence tape on bottle for tampering.
 - 3. Pour contents of plastic bottle into simulator jar.
 - 4. Reattach jar to simulator top housing.
 - 5. Attach batch number label from plastic bottle to simulator.
 - 6. Review data entry format for Breath Test Section Personnel from Policy/Procedure Manual

VII. SUPERVISORY KEYS AND FUNCTION

- A. Set - Advance.
- B. F1 - F2.
- C. Copy.
- D. Supervisory tests.
- E. Abort - **Never** abort during Ambient Zero.

VIII. REPORTS AND FORMS

- 1. Simulator Solution Replacement Record found in Policy/Procedure Manual (483.BTS)

IX. PRACTICAL LABORATORY

- 1. Solution change procedure.
- 2. Purging the instrument.
- 3. Paperwork and supplies to check with instrument.

X. REVIEW AND FINAL EXAM

XI. ISSUE NECESSARY EQUIPMENT AND PAPERWORK

XII. DISMISS