XYLOSE DETERMINATION
Updated September 2013

I. Reference:

A. P. Trinder. 1975. Analyst. 100:12.

II. Reagents:

A. 6.3682 N HCl

1. 52.63% HCl (v/v)

B. Color Reagent

1. Add 0.5 g Phloroglucinol ($C_6H_6O_3$)
2. q.s. to 100 mL with glacial acetic acid ($C_2H_4O_2$)

C. 0.2% Benzoic Acid ($C_7H_6O_2$)

1. Add 2.0 g Benzoic Acid to 1L volumetric
2. q.s. to 1L with dH_2O
3. Heat and stir on stir plate

NOTE: Handle chemicals in designated fume hood.

III. Personal Protective Equipment:

A. Lab coat
B. Safety glasses/goggles
C. Latex gloves

IV. Procedure:

A. Add 0.95 ml 6.3682 N HCl to test tube.
B. Add 50 µl deproteinized blood (H_2O or blood w/o xylose ($C_5H_{10}O_5$))
C. Vortex thoroughly
D. Add 5 ml color reagent and mix
E. Place in boiling water bath for exactly 5 min
F. Cool rapidly
G. Read and record absorbance at 554 nm

V. Standards:

A. Stock standard

1. Add .5 g Xylose to a 100mL volumetric
2. q.s. to 100 mL with .2% Benzoic Acid

Mg/dL	ML stock/100 mL .2% Benzoic Acid
5	1
10	2
15	3
20	4
25	5
30	6
35	7
40	8