



Manufacturer's Information

Test No. 10-564: Blood Alcohol

Each sample pack consisted of four vials of blood, each with a different blood alcohol concentration (BAC). Participants were requested to analyze each vial and report the blood alcohol concentration.

SAMPLE PREPARATION-

A stock solution of ethanol in water was used to spike each item. The stock solution was prepared by combining 10 grams of absolute ethanol with enough distilled water to produce a solution of 100 milliliters. The stock solution was stored in a covered flask, which was opened only when a volume of the solution was needed for production.

In order to obtain sufficient volume for this test, three batches were prepared of each item (A, B and C). Each batch of all items was prepared separately using the following procedure and all glassware was cleaned between preparations.

ITEMS 1, 2, 3 and 4 (PREPARATION): Sample preparation consisted of adding a predetermined amount of ethanol stock solution to a 500mL graduated cylinder containing human whole blood (which had been drawn into citric acid preservative bloodbank bags). The blood was then transferred to a beaker, where the equivalent of 1% w/v sodium fluoride was added and then stirred with a magnetic stirrer for 10 minutes before pipetting the mixture into the prelabeled vials, which contained 12mg potassium oxalate and 15mg sodium fluoride (this NaF was included in the 1% w/v NaF calculation). The vials were sealed and inverted 8-10 times to mix the chemicals in the vials with the blood solution. All vials were placed in a refrigerator immediately after production until the sample packs were prepared.

SAMPLE PACK ASSEMBLY: Once predistribution results were received, each sample pack was prepared containing an Item 1, 2, 3 and 4 from the same batch and was placed into a Department of Transportation regulated mailing system. Each sample pack was labeled with test number and batch letter and returned to the refrigerator until shipment.

VERIFICATION-

Laboratories that conducted predistribution analysis of the samples reported consistent results for each batch that were comparable to the preparation BAC.

<u>Item</u>	<u>Preparation BAC (g/100mL)</u>
Item 1	0.11
Item 2	0.25
Item 3	0.05
Item 4	0.18

Please note that the Preparation BAC is the value used for calculations during the test preparation phase and may not necessarily represent the final concentration of the samples. It is advised to wait for the Grand Mean statistics available in the Summary and Individual Reports before evaluating performance.