

## State of Alaska **Department of Public Safety**

Sean Parnell, Governor Joseph A. Masters, Commissioner

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## State of Alaska Breath Alcohol Program DataMaster DMT and Interference Detected Status Messages

The DataMaster DMT is a three-filter infrared detection instrument that is used to measure the amount of ethanol present in a subject's breath sample. The three-filter system enables the instrument to detect the presence of substances other than ethanol which can be found in a subject's breath sample and measured by the DMT. These substances are "interfering substances." Examples of interfering substances are acetone, inhalants and methanol.

The primary filter of the DataMaster DMT is used to determine the concentration of ethanol in a breath sample. The two secondary filters are used to check for interfering substances. If the readings from the two secondary filters are not consistent with a breath sample containing only ethanol, an interference detected status message is generated.

Ethanol may well be present in a breath sample that results in the DataMaster DMT generating an interference detected status message. It is possible for a subject to have both an impairing amount of ethanol and a small amount of an interfering substance in his or her body system – a situation which will result in the instrument generating an interference detected status message.

An interference detected status message does not indicate that the instrument is broken or malfunctioning. The instrument is communicating that an interfering substance is present in the breath sample. The reason the instrument generates the messages is to protect against the generation of artificially elevated ethanol readings due to the presence of an interfering substance. An interference detected status message for a subject breath sample is not the result of environmental issues or the external standard.

The appropriate course of action to be followed in response to the DataMaster DMT generating an interference detected status message for a subject sample is to retest the subject by means of the DataMaster DMT one time. If an interference detected status message again is generated, a blood sample is to be obtained by means of a search warrant. No more than two DataMaster DMT testings are to be attempted. Blood sample analysis accurately can determine the ethanol concentration, unaffected by the presence of an interfering substance.

The formerly in service DataMaster cdm instruments, like the currently in service DataMaster DMT instruments, also used a three-filter system to detect the presence of interfering substances. The amount of an interfering substance in a subject breath sample which will trigger the generation of an interference detected status message, however, is lower in the updated DataMaster DMT instrument. This lower threshold setting reflects the best now current scientific knowledge.