

Research Report  
Florida Department of Law Enforcement  
Alcohol Testing Program  
02/18/2010

Subject: Electronic Data Download Date/Time Stamp  
Researchers: Patrick Murphy, Matthew Malhiot

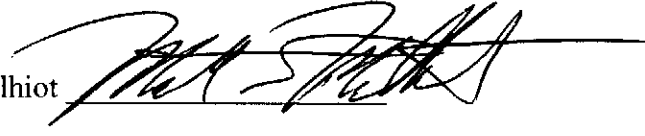
Issue: It was brought to management's attention that a few of the electronic data reports from Cobra had a date and time stamp that was later (or more recent) than the download date and time stamp, which seemed to indicate that the data contained in the report was transmitted to Cobra in Tallahassee before the report had actually been completed. This being impossible, we were tasked with reconciling the apparent inconsistency.

Considerations: There were two possible sources of date and time information: the date and time contained in the remote instrument engaged in transmitting the data, and the date and time contained in the database receiving the transmission. For engineering reasons, it was considered highly likely that the download date and time stamp printed at the bottom of the electronic data report was generated by the database receiving the data and that the conflict in times reported was due to a slight lack of synchronization between the instrument time and the database time.

Testing Method: In order to determine which date and time stamp was being printed at the bottom of the electronic report, we had to create two divergent times. We took an instrument which had just completed a department inspection. We changed the time in the instrument by setting it approximately six hours ahead of actual time, then downloaded the data to Cobra, noting the actual download time. The instrument time was set to 8:00AM and the download commenced at approximately 2:00PM. If the date and time stamp at the bottom of the electronic data was taken from the instrument's date and time values, the time should read roughly "8:00." If the date and time information used was the date and time values held by the database in Tallahassee, the download time printed at the bottom of the electronic data report should read roughly 14:00, as the system uses a 24-hour time notation. Once the download occurred, we reset the instrument time to correspond to actual time.

Conclusions: We printed the electronic data from the department inspection (attached) and examined the data download date/time stamp at the bottom of the last page. The value read 13:59, proving conclusively that the data download date and time stamp is generated by the database receiving the data and not by the instrument and that the apparent inconsistency in the initial problem was caused by a slight lack of synchronization between the two time-keeping standards.

Patrick Murphy 

Matthew Malhiot 

**Florida Department of Law Enforcement  
Alcohol Testing Program**

**Inspection Test Data**

Intoxilyzer 8000 Serial Number: 80-000948

<b>Agency</b> GLADES COUNTY S.O.	<b>Date</b> 02/16/2010	<b>Source</b> Department Inspection
<b>Inspector</b> MURPHY,PATRICK,J	<b>Time</b> 15:31:11	<b>Software</b> 8100.27
<b>0.05 Lot #</b> 200808A	<b>0.08 Lot #</b> 200811C	<b>0.20 Lot #</b> 200908C
<b>Expiration</b> 08/14/2010	<b>Expiration</b> 11/10/2010	<b>Expiration</b> 08/27/2011
		<b>0.08 Gas Lot #</b> AG907208
		<b>Expiration</b> 03/13/2011
<b>Number of Simulators</b> 5	<b>Average Standard Deviation</b> 0.0007	<b>Compliance</b> Yes

Check or Test	Result	Test	Result
Diagnostic Check (Pre-Inspection): OK	Yes	Alcohol Free Test #1	0.000
Date and/or Time Adjusted	No	0.05 g/210L Test #1	0.050
Minimum Sample Volume Check: OK	Yes	0.08 g/210L Test #1	0.081
Barometric Pressure Sensor Check: OK	Yes	0.20 g/210L Test #1	0.202
Alcohol Free Subject Test: 0.000	Yes	0.08 g/210L Dry Gas Std Test #1	0.079
Mouth Alcohol Test: Slope Not Met	Yes	Interferent Detect Test #1	INT
Interferent Detect Test: Interferent Detect	Yes	Alcohol Free Test #2	0.000
Diagnostic Check (Post-Inspection): OK	Yes	0.05 g/210L Test #2	0.050
Alcohol Free Test: OK	Yes	0.08 g/210L Test #2	0.081
0.05 g/210L Test: OK	Yes	0.20 g/210L Test #2	0.204
0.08 g/210L Test: OK	Yes	0.08 g/210L Dry Gas Std Test #2	0.080
0.20 g/210L Test: OK	Yes	Interferent Detect Test #2	INT
0.08 g/210L Dry Gas Std Test: OK	Yes	Alcohol Free Test #3	0.000
		0.05 g/210L Test #3	0.051
		0.08 g/210L Test #3	0.082
		0.20 g/210L Test #3	0.204
		0.08 g/210L Dry Gas Std Test #3	0.080
		Interferent Detect Test #3	INT
		Alcohol Free Test #4	0.000
		0.05 g/210L Test #4	0.051
		0.08 g/210L Test #4	0.081
		0.20 g/210L Test #4	0.204
		0.08 g/210L Dry Gas Std Test #4	0.079
		Interferent Detect Test #4	INT
		Alcohol Free Test #5	0.000
		0.05 g/210L Test #5	0.050
		0.08 g/210L Test #5	0.082
		0.20 g/210L Test #5	0.204
		0.08 g/210L Dry Gas Std Test #5	0.078
		Interferent Detect Test #5	INT
		Alcohol Free Test #6	0.000
		0.05 g/210L Test #6	0.051
		0.08 g/210L Test #6	0.081
		0.20 g/210L Test #6	0.205
		0.08 g/210L Dry Gas Std Test #6	0.077

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Interferent Detect Test #6	INT
Alcohol Free Test #7	0.000
0.05 g/210L Test #7	0.051
0.08 g/210L Test #7	0.081
0.20 g/210L Test #7	0.205
0.08 g/210L Dry Gas Std Test #7	0.077
Interferent Detect Test #7	INT
Alcohol Free Test #8	0.000
0.05 g/210L Test #8	0.051
0.08 g/210L Test #8	0.081
0.20 g/210L Test #8	0.204
0.08 g/210L Dry Gas Std Test #8	0.077
Interferent Detect Test #8	INT
Alcohol Free Test #9	0.000
0.05 g/210L Test #9	0.051
0.08 g/210L Test #9	0.081
0.20 g/210L Test #9	0.204
0.08 g/210L Dry Gas Std Test #9	0.077
Interferent Detect Test #9	INT
Alcohol Free Test #10	0.000
0.05 g/210L Test #10	0.051
0.08 g/210L Test #10	0.081
0.20 g/210L Test #10	0.204
0.08 g/210L Dry Gas Std Test #10	0.078
Interferent Detect Test #10	INT
0.05 g/210L Test (Std Dev)	0.0004
0.08 g/210L Test (Std Dev)	0.0004
0.20 g/210L Test (Std Dev)	0.0008
0.08 g/210L Dry Gas Std Test (Std Dev)	0.0012

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**Remarks:**

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Data Download Date/Time 02/17/2010 13:59