Alaska DMT Software Version 3.01 Evaluation

May 7, 2015

100673was used in the evaluation

During routine evaluation of DataMaster DMTs in the laboratory it was discovered that if an external standard that is within 30 days of expiring is in use and a Verification of Calibration fails the software will allow subject testing to occur. This information was sent to the manufacturer and they reproduced the situation. A software revision (3.01) was sent to us for evaluation.

An external standard with an expiration date of 6/1/2015 was used. A blank error was triggered while a verification of calibration was in process. The 3.01 recognized this and did not allow any subject testing until a verification of calibration successfully completed. Also ran a subject test to confirm there were no changes made.

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument State of Alaska

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 05/07/2015

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

Serial #: 100673

TARGET AT 29.64: 0.079 LOT #: 11313080A1 EXPIRATION: 06/01/2015 TANK PRESSURE: 233 psi

BLANK TEST 0.000 08:10
INTERNAL STANDARD VERIFIED 08:10
EXTERNAL STANDARD 0.046 08:10

Blank Error

Diagnostic Check

VERSIONS DMT: 3.01 PIC: 3.03 Modem: 2.6 Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED Breath Tube = 46.1°C PASSED

PUMP INFO

Flow Rate = 4.797 L/M

PASSED

DETECTOR INFO

PUMP ON PUMP OFF PASSED PASSED

FILTER INFO Filter 1 Filter 2

Filter 3

PASSED PASSED PASSED

INTERNAL STANDARD

PASSED

Instrument required a voc after this failed

- I, Nita J. Bolz, after being first duly sworn, depose and state as follows:
- (1) I am a Forensic Scientist IV at the State of Alaska Scientific Crime Detection Laboratory.
- (2) The Alaska Scientific Crime Detection Laboratory is an entity within the Department of Public Safety.
- (3) I am the Scientific Director of the State Breath Alcohol Program.
- (4) In that capacity, I am responsible for overseeing the Breath Alcohol Program, which includes assuring that instruments are calibrated and maintaining program records.
- (5) The above is a true and accurate verification of calibration, which is performed by the instrument's software, as specified by the State Breath Alcohol Program. Verification of calibration is a regularly conducted and regularly recorded activity of the State Breath Alcohol Program.
- (6) The referenced instrument is certified for evidentiary use in the State of Alaska.

Nita J.Bolz		
Scientific Director		
State Breath Alcohol Program		
Subscribed and sworn before me this	day of	. 20

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument State of Alaska

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 05/07/2015

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

Serial #: 100673

TARGET AT 29.64: 0.079 LOT #: 11313080A1 EXPIRATION: 06/01/2015 TANK PRESSURE: 230 psi

BLANK TEST	0.000	08:15
INTERNAL STANDARD	VERIFIED	08:16
EXTERNAL STANDARD	0.078	08:16
BLANK TEST	0.000	08:17
EXTERNAL STANDARD	0.078	08:17
BLANK TEST	0.000	08:18
EXTERNAL STANDARD	0.078	08:18
BLANK TEST	0.000	08:19
EXTERNAL STANDARD	0.078	08:19
BLANK TEST	0.000	08:20
EXTERNAL STANDARD	0.078	08:20
BLANK TEST	0.000	08:21

Average = 0.0780 Std Dev = 0.0000

Diagnostic Check

VERSIONS DMT: 3.01 PIC: 3.03 Modem: 2.6 Questions: 2.2

TEMPERATURES

TENTE BIONTONES	
Sample Chamber = 48.9°C	PASSED
Breath Tube = 44.6°C	PASSED
PUMP INFO	
Flow Rate = 4.752 L/M	PASSED
DETECTOR INFO	
PUMP ON	PASSED
PUMP OFF	PASSED
FILTER INFO	
Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED
INTERNAL STANDARD	PASSED

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Nita J.Bolz		
Scientific Director		
State Breath Alcohol Program		
Subscribed and sworn before me this	day of	,20

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100673

Date: 05/07/2015 Time: 08:22:53

SUBJECT NAME:

TEST TEST
LICENSE #: TEST

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7037

DEPT/AGENCY:
AAA1

CASE/REPORT: TEST TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION NOMINAL: 0.080

TARGET AT 29.63: 0.079 LOT #: 11313080A1 EXPIRATION: 06/01/2015

 DIAGNOSTIC CHECK
 PASSED
 08:24

 BLANK TEST
 0.000
 08:24

 INTERNAL STANDARD
 VERIFIED
 08:24

 EXTERNAL STANDARD
 0.078
 08:24

 BLANK TEST
 0.000
 08:25

 BLANK TEST
 0.000
 08:26

 EXTERNAL STANDARD
 0.078
 08:27

 BLANK TEST
 0.000
 08:26

 EXTERNAL STANDARD
 0.000
 08:27

 BLANK TEST
 0.000
 08:28

---- Alcohol(g/210L)
---- Flow Rate(L/M)
Min. Flow Rate(L/M) 10 15 20 25 30 10.00 4.00 8.00 12.00 20.00 24.00 16.00 28.00 32.00 36.00 40.00

RA

SUBJECT TEST

Alaska Department of Public Safety DATAMASTER dmt: 100673

Date: 05/07/2015 Time: 08:33:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY: AAA1

CASE/REPORT: TEST TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION NOMINAL: 0.080
TARGET AT 29.64: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

VERIFIED 0.039 PASSED 0.000 08:34 08:34 08:34 08:34

DIAGNOSTIC CHECK BLANK TEST INTERNAL STANDARD EXTERNAL STANDARD

Standard Out of Range

Bolz, Nita J (DPS)

From: Scott Marhefka <eng@npas.com>
Sent: Wednesday, May 06, 2015 9:49 AM

To: Bolz, Nita J (DPS)

Subject: Description of 3.01 software

Hello Nita,

We have changed the software from Version 3.00 to 3.01.

On 5/1/2015 Chuck Foster e-mailed

"I found that if a tank is installed that will be expired within the next month (leading to the status changing from "Ready <Push Run>" to "Ready <Change Tank Soon>") and a VoC fails, the status remains "Ready <Change Tank Soon>" instead of switching to "Ready <VoC Required>".

More importantly, this also allows for a subject test to be run even though the most recent VoC had failed. Nita wanted me to inform you of this issue and to see if you could reproduce it. It seems to only occur when the expiration date is approaching and not when the tank pressure is getting too low."

We confirmed that he was correct. The "Change Tank Soon" message was given priority over the "VoC Required" message which in turn permitted a subject test to be run. We changed the order of the logic so that the "VoC Required" message would be given priority so the DMT will operate as expected. This is the only change made from 3.00 to 3.01.

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Scott Marhefka National Patent Analytical Systems 2090 Harrington Memorial Road Mansfield, OH 44903

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