

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

Effective: 1/18/2024

Version: 4.0

Instrument #: 100676

Analyst/Technician(s): Megan Carlock

Start Date: 12/9/24

Date Instrument Received: 12/9/24

Reason for instrument evaluation

Returned for a damaged breath hose. The white piece of plastic is detached from the rest of the hose.

### Visual Inspection:

- |                                                                                               |                                                                         |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Clean                                                     | <input checked="" type="checkbox"/> Replace missing screws              |
| <input checked="" type="checkbox"/> Cermetex Box (modem) is secure                            | <input checked="" type="checkbox"/> Ensure modem cable present          |
| <input checked="" type="checkbox"/> Double Check Valve secured to wall                        | <input checked="" type="checkbox"/> All tubing and connections secure   |
| <input checked="" type="checkbox"/> O-ring inspection and ensure 2 replacement O-rings in bag |                                                                         |
| <input checked="" type="checkbox"/> Attach VOC                                                | <input checked="" type="checkbox"/> VOC Internal Standard $\leq 3.00\%$ |
| <input checked="" type="checkbox"/> Verify software version                                   |                                                                         |

Condition of item: ☐ No apparent damage ☒ Damaged

NOTE: As Found Linearity is required if the instrument is not damaged and the internal standard value is not more than 4.00%

### As Found Conditions (if performed):

Barometric Pressure (inHg): 29.57 Temperature (C): 21.6 Relative Humidity (%) 21

Linearity Test Levels (g/210L): 0.020, 0.080, 0.300

Notes: Resecured the double check valve to the wall. Replaced O-ring.  
Linearity was performed since it is not influenced by the broken piece, however a non-drinking subject test could not be performed.

☐ Attach Non-Drinking Subject Test Not Performed

### Conclusion:

- |                                                |                                                  |
|------------------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> Ready for Adjustment  | <input checked="" type="checkbox"/> Needs Repair |
| <input type="checkbox"/> Ready for Calibration |                                                  |

Lab Work End Date: 12/10/24

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100676

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/09/2024

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.54: 0.079

LOT #: 09523080A1

EXPIRATION: 05/05/2025

TANK PRESSURE: 274 psi

BLANK TEST 0.000 09:59

INTERNAL STANDARD VERIFIED 09:59

Xq = 0.089 (1.35%)

EXTERNAL STANDARD 0.079 09:59

X[1] = 0.0793 (-0.0008) (-0.0021)

BLANK TEST 0.000 10:00

EXTERNAL STANDARD 0.079 10:01

X[1] = 0.0795 (-0.0007) (-0.0011)

BLANK TEST 0.000 10:01

EXTERNAL STANDARD 0.079 10:02

X[1] = 0.0789 (-0.0012) (-0.0009)

BLANK TEST 0.000 10:03

EXTERNAL STANDARD 0.080 10:03

X[1] = 0.0798 (-0.0005) (-0.0014)

BLANK TEST 0.000 10:04

EXTERNAL STANDARD 0.080 10:04

X[1] = 0.0800 (0.0000) (-0.0008)

BLANK TEST 0.000 10:05

Average = 0.0794

Std Dev = 0.0005

## Diagnostic Check

### VERSIONS

DMT: 3.02

PIC: 3.03

Modem: 2.6

Questions: 2.2

### TEMPERATURES

Sample Chamber = 48.6°C PASSED  
(44.0°C - 52.0°C)

Breath Tube = 48.1°C PASSED  
(38.0°C - 50.0°C)

### SETTINGS

Lamp Voltage = 1.62 V PASSED  
(0.98 V - 2.30 V)

Cooler Voltage = 1.77 V PASSED  
(1.02 V - 2.38 V)

Bias Voltage = 78 V PASSED  
(47 V - 109 V)

Chopper Freq = 523 Hz PASSED  
(475 Hz - 575 Hz)

Barometer = 29.5 in

### PUMP INFO

Flow Rate = 4.127 L/M PASSED  
(3.500 L/M - 6.500 L/M)

### DETECTOR INFO

PUMP ON PASSED  
(0.002 V <= 0.010 V)

PUMP OFF PASSED  
(0.002 V <= 0.010 V)

### FILTER INFO

Filter 1 PASSED

Filter 2 PASSED

Filter 3 PASSED

### INTERNAL STANDARD

Xq = 0.090 0.87% PASSED  
(0.00% - 4.00%)

LINEARITY CHECK

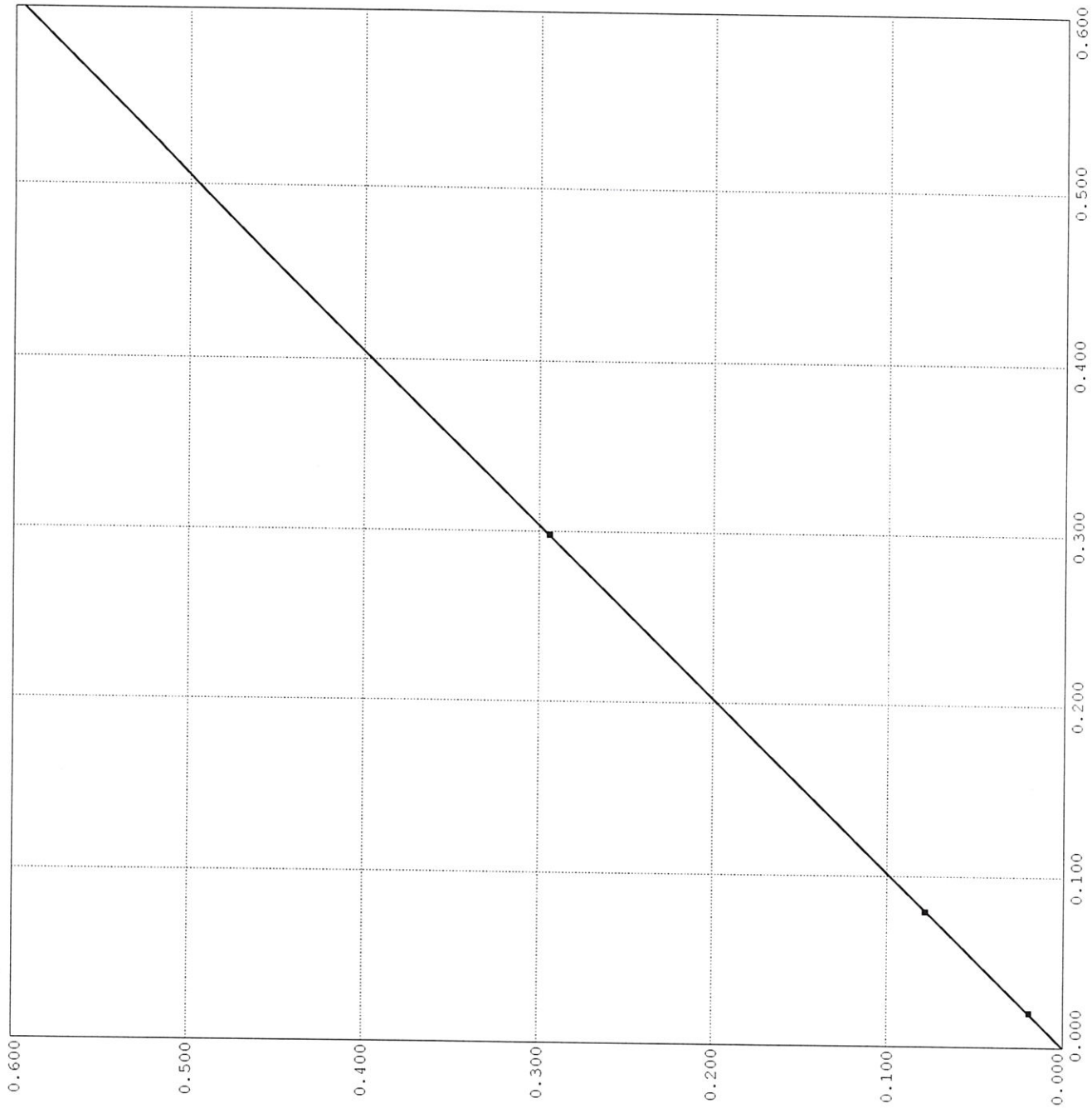
-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100676  
 -----

Date: 12/10/2024  
 Time: 09:22:11

SUPERVISOR NAME:  
 MEGAN CARLOCK  
 OPERATOR'S #: 10747

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.020  | 0.0200  | 0.0000    |
| 0.079  | 0.0794  | 0.0005    |
| 0.297  | 0.2948  | 0.0004    |

SLOPE = 0.990977  
 R<sup>2</sup> = 0.999989



MNC

# LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

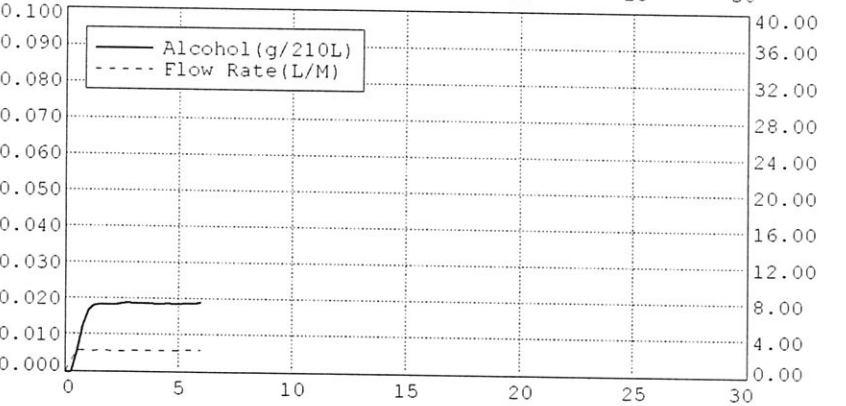
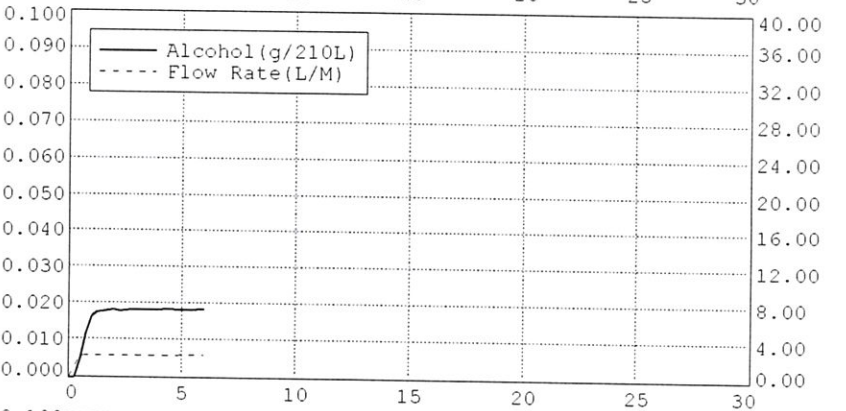
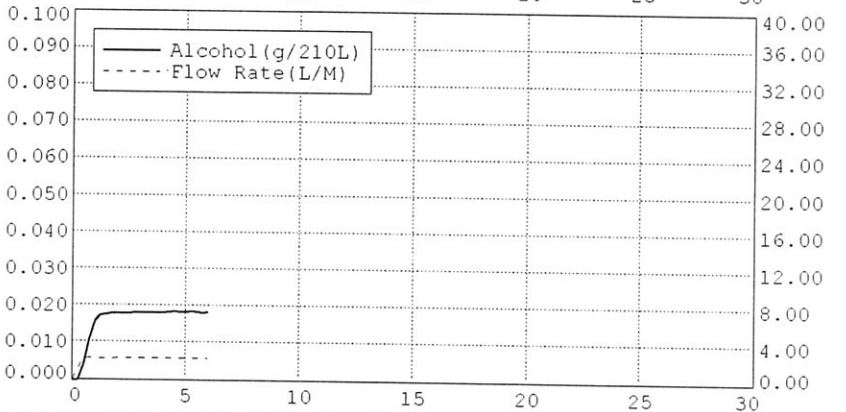
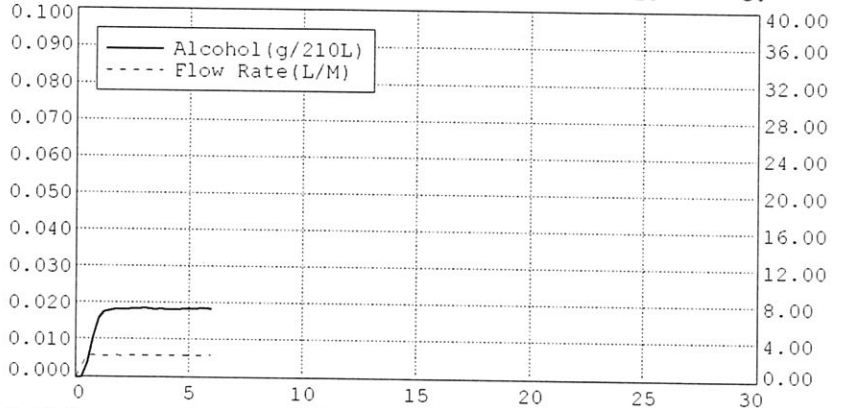
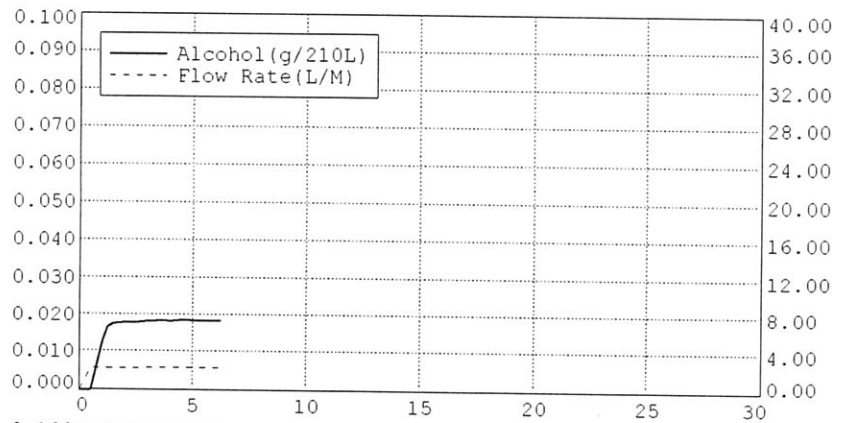
Date: 12/10/2024  
Time: 09:22:13

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.67: 0.020  
LOT #: AG408002  
EXPIRATION: 03/20/2026  
TANK PRESSURE: 291 psi

| Test Type         | Value    | Time  |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 09:24 |
| INTERNAL STANDARD | VERIFIED | 09:24 |
| EXTERNAL STANDARD | 0.020    | 09:24 |
| BLANK TEST        | 0.000    | 09:25 |
| EXTERNAL STANDARD | 0.020    | 09:25 |
| BLANK TEST        | 0.000    | 09:26 |
| EXTERNAL STANDARD | 0.020    | 09:26 |
| BLANK TEST        | 0.000    | 09:27 |
| EXTERNAL STANDARD | 0.020    | 09:28 |
| BLANK TEST        | 0.000    | 09:28 |
| EXTERNAL STANDARD | 0.020    | 09:29 |
| BLANK TEST        | 0.000    | 09:30 |

Average = 0.0200  
Std Dev = 0.0000



# LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

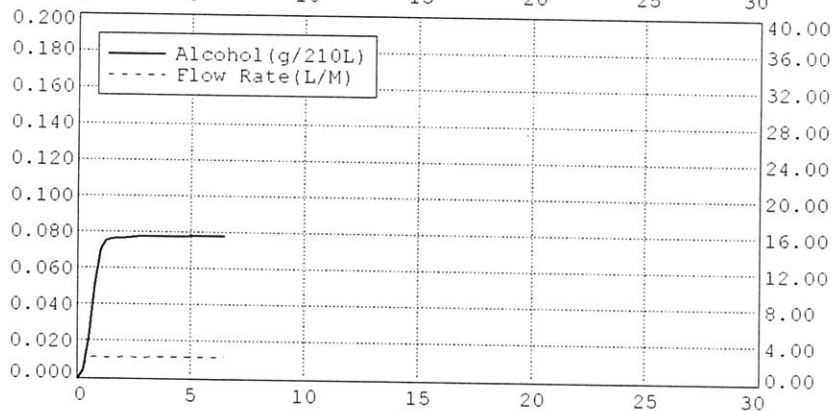
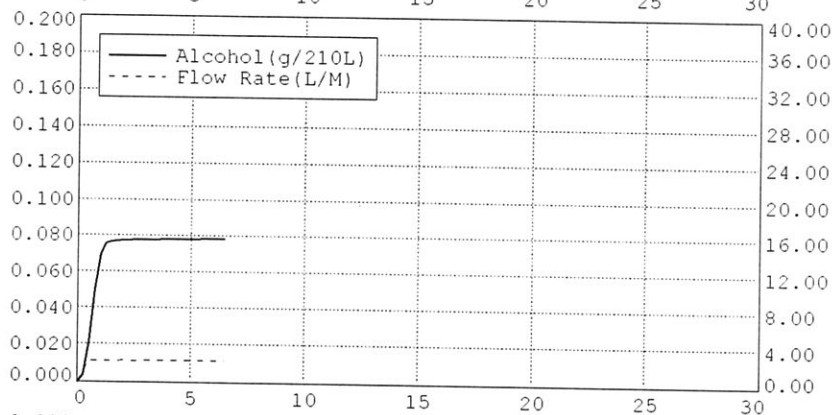
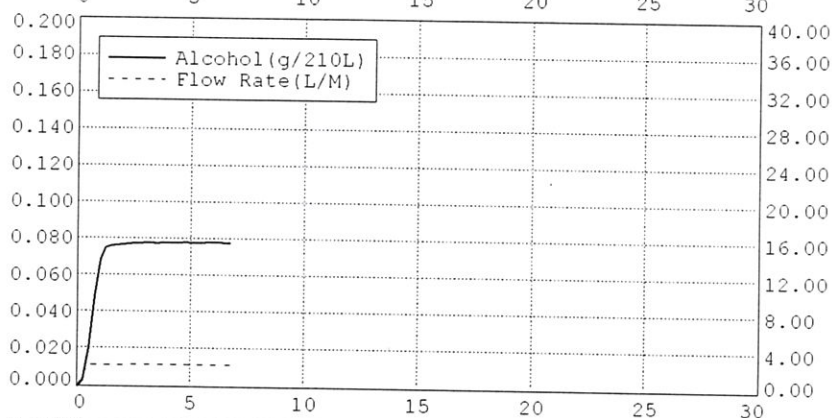
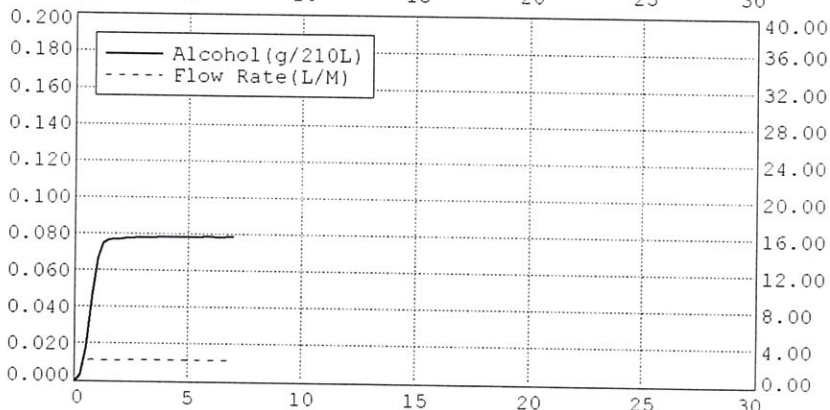
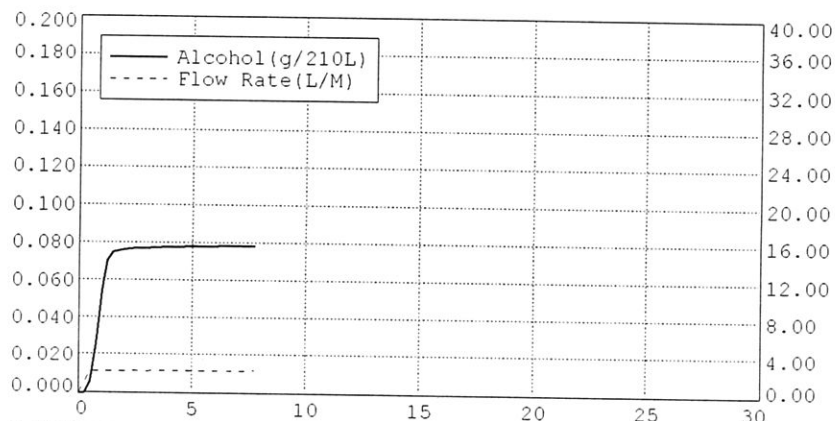
Date: 12/10/2024  
Time: 09:31:29

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.67: 0.079  
LOT #: 09523080A1  
EXPIRATION: 05/05/2025  
TANK PRESSURE: 256 psi

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 09:32 |
| INTERNAL STANDARD | VERIFIED | 09:33 |
| EXTERNAL STANDARD | 0.080    | 09:33 |
| BLANK TEST        | 0.000    | 09:34 |
| EXTERNAL STANDARD | 0.080    | 09:34 |
| BLANK TEST        | 0.000    | 09:35 |
| EXTERNAL STANDARD | 0.079    | 09:35 |
| BLANK TEST        | 0.000    | 09:36 |
| EXTERNAL STANDARD | 0.079    | 09:36 |
| BLANK TEST        | 0.000    | 09:37 |
| EXTERNAL STANDARD | 0.079    | 09:37 |
| BLANK TEST        | 0.000    | 09:38 |

Average = 0.0794  
Std Dev = 0.0005



# LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 12/10/2024  
Time: 09:41:32

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
TARGET AT 29.65: 0.297  
LOT #: AG427706  
EXPIRATION: 10/03/2026  
TANK PRESSURE: 477 psi

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 09:42 |
| INTERNAL STANDARD | VERIFIED | 09:43 |
| EXTERNAL STANDARD | 0.295    | 09:43 |
| BLANK TEST        | 0.000    | 09:44 |
| EXTERNAL STANDARD | 0.295    | 09:44 |
| BLANK TEST        | 0.000    | 09:45 |
| EXTERNAL STANDARD | 0.295    | 09:45 |
| BLANK TEST        | 0.000    | 09:46 |
| EXTERNAL STANDARD | 0.295    | 09:46 |
| BLANK TEST        | 0.000    | 09:47 |
| EXTERNAL STANDARD | 0.294    | 09:47 |
| BLANK TEST        | 0.000    | 09:48 |

Average = 0.2948  
Std Dev = 0.0004

