

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 05/15/2020
Effective: 05/15/2020

Version: DMCEF 2020 R0
Status: Active

Derek Walton *DW*

Instrument S/N 100699 Analyst Carlie Parley Start Date 5/25/2021

Diagnostic Test (attached)

Internal Standard value $\leq 3.00\%$

Voltage Checks

Adjust voltages, if needed

i. Lamp (2.6V Maximum)

ii. Bias

iii. Cooler (2.0V Maximum)

iv. Chopper Frequency

v. Detector Voltage (-0.100V to 0.100V)

Set RFI

Adjust barometer reading to match NIST traceable barometer

Adjust volume setting, if needed (1.5L +/- 0.1L)

Print Technician Screen (attached)

Print Calibration Factors (attached)

Volume Test - Minimum 1.5 L (1.3L to 1.7L)

Linearity Test (attached)

Levels Used

i. 0.020g/210L Mnf Airgas Lot AG928203 Exp 10/9/2021

ii. 0.040g/210L Mnf Airgas Lot AG915607 Exp 6/5/2021

iii. 0.080g/210L Mnf Airgas Lot AG-018102 Exp 6/29/2022

iv. 0.100g/210L Mnf Airgas Lot AG-108404 Exp 3/25/2023

v. 0.200g/210L Mnf Guth Lot 19200 Exp 8/6/2021

Simulator S/N DR6267 Date Calibrated 11/17/2020

vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/2021

Simulator S/N DR4177 Date Calibrated 11/17/2020

Functional Tests (attached)

Incomplete

Invalid

Interference

i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021

Simulator S/N DR4178 Date Calibrated 11/18/2020

ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021

Simulator S/N DR4176 Date Calibrated 11/18/2020

iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021

Simulator S/N DR4163 Date Calibrated 11/17/2020

Exceeded Attempts

RFI

Verify stylus is calibrated

Verification of Calibration

Reset Options

Non-Drinking Subject Test (attached)

Clear Memory

Upload

Remove tank prior to shut down

Add Linearity Data to Spreadsheet

End Date 5/25/2021

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 09:09:52

VERSIONS
DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.3°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.56 V PASSED
(0.94 V - 2.18 V)
Cooler Voltage = 1.56 V PASSED
(0.94 V - 2.18 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.852 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.003 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 = 0.078 1.10% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 9:23 AM

Temperatures (°C)
Sample Cell: 49.2°C
Breath Tube: 42.3°C

Current Barometer 29.8 in
Volume (Ltr) 1.56

Settings
Lamp: 1.56 V
Bias: 80 V
Cooler: 1.56 V
Chopper: 524 Hz

Voltages (V)
Flow: 1.05 V
Detector: -0.069 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/19/2021
Time: 11:58:43

OPERATOR NAME: *DW*
CARLIE BAILEY
CERTIFICATE #: 10436

Ca = 0.1000
CAL = 0.970671 0.800 <= CAL < 1.200
b1 = 0.0008 0.0000 <= b1 < 0.0040
b2 = 0.0057 0.0010 <= b2 < 0.0100
b3 = 0.0005 0.0000 <= b3 < 0.0040
Xq = 0.0788 0.0500 <= Xq < 0.2000
a21 = 1.157579 1.050 <= a21 < 1.300
a31 = 0.417855 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 09:30:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *DJW*
CARLIE BAILEY
OPERATOR'S #: 10436

DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.79: 0.080

DIAGNOSTIC CHECK	PASSED	09:33
BLANK TEST	0.000	09:33
INTERNAL STANDARD	VERIFIED	09:33
EXTERNAL STANDARD	0.077	09:33
BLANK TEST	0.000	09:34
SUBJECT SAMPLE (Vol=1.57L)	0.000	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.077	09:36
BLANK TEST	0.000	09:37

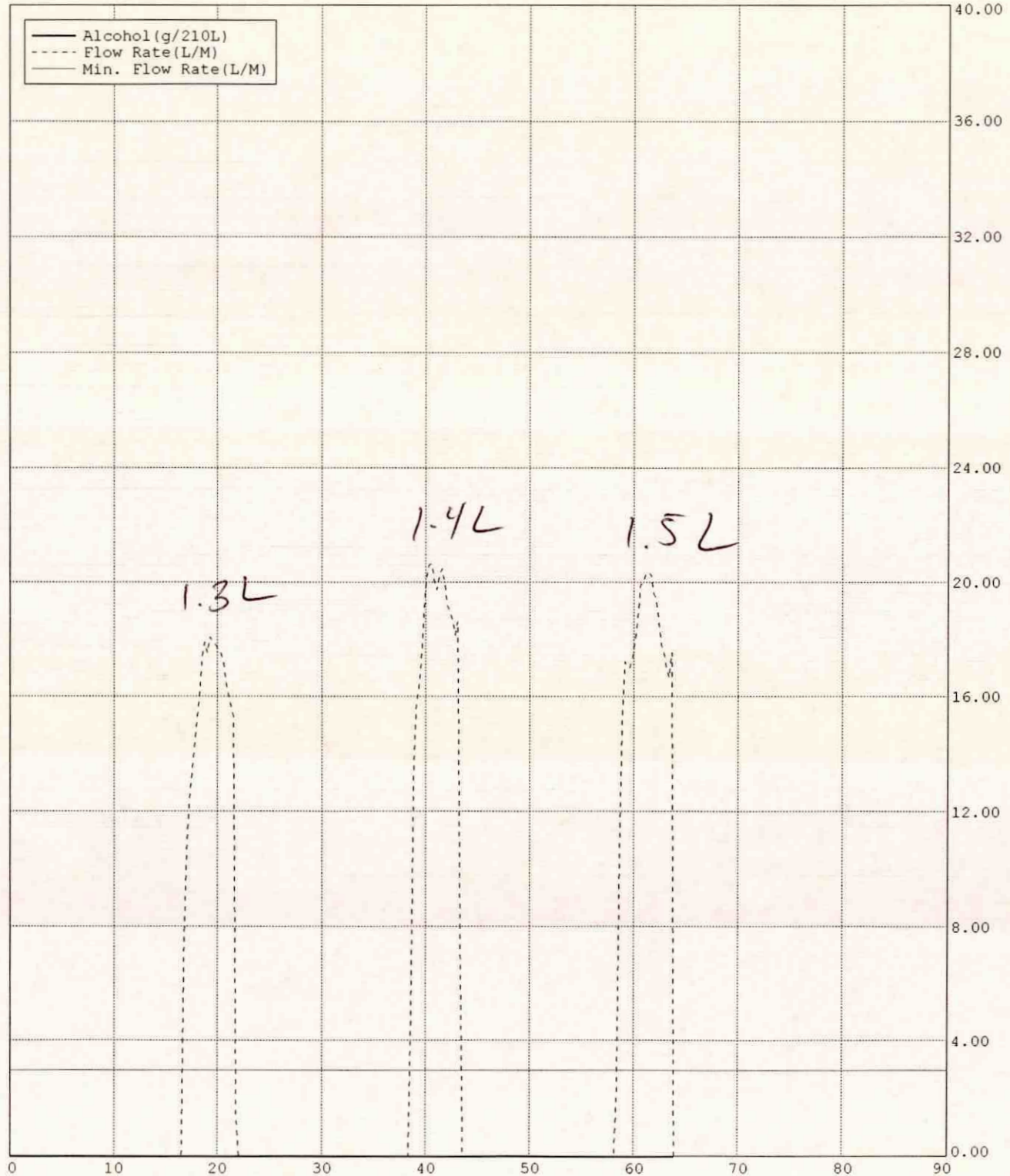
AG018102

Exp. 06/29/2022

CKB 6/7/2021

DJW

CKB DJW



LINEARITY CHECK

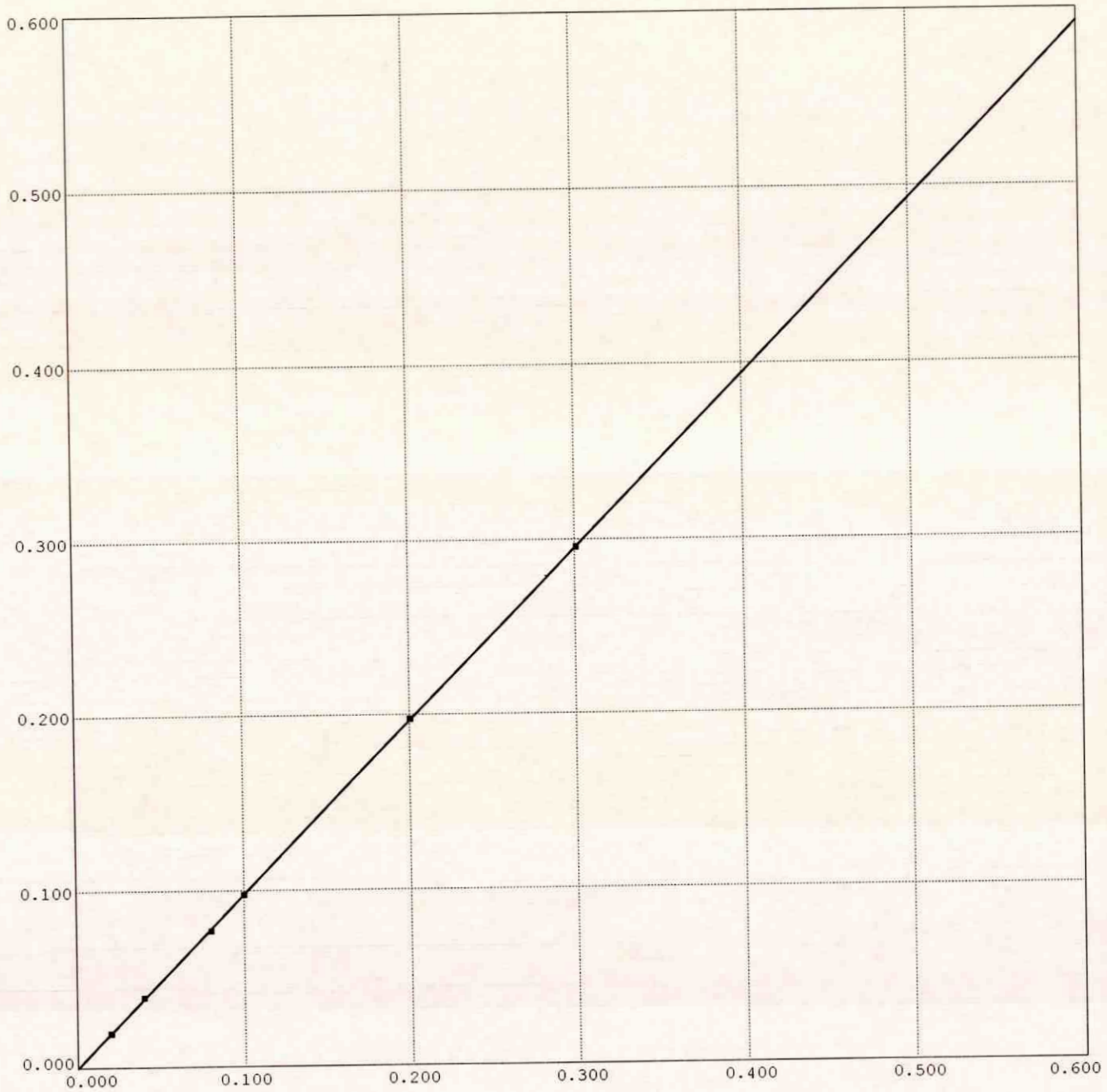
Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 09:43:01

SUPERVISOR NAME:
CARLIE BAILEY *CB*
OPERATOR'S #: 10436

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.040	0.0402	0.0004
0.080	0.0780	0.0007
0.100	0.0986	0.0005
0.200	0.1982	0.0004
0.300	0.2962	0.0004

SLOPE = 0.987993
R² = 0.999964



CB *dmt*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100699

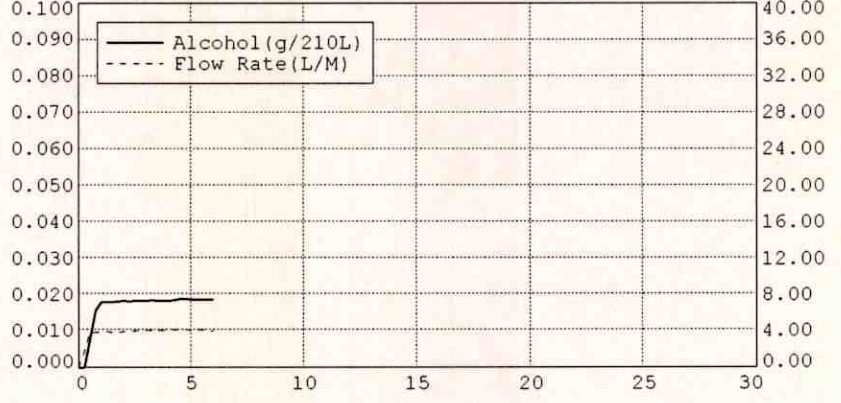
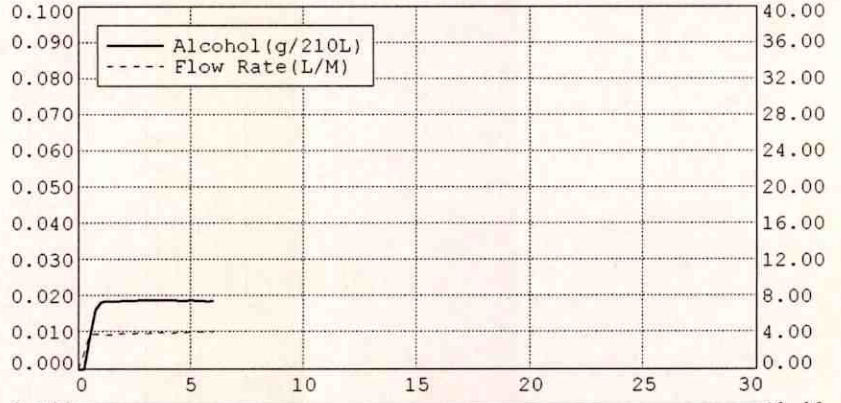
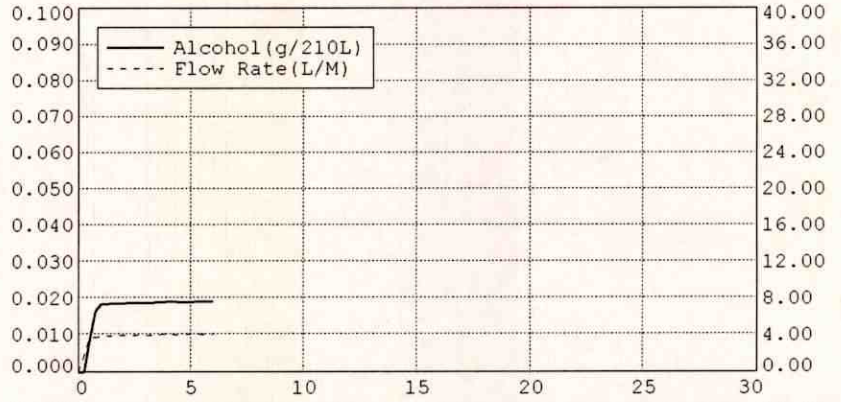
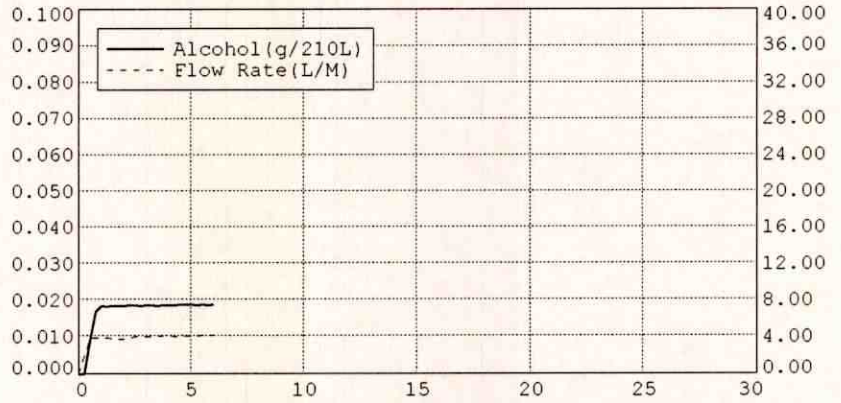
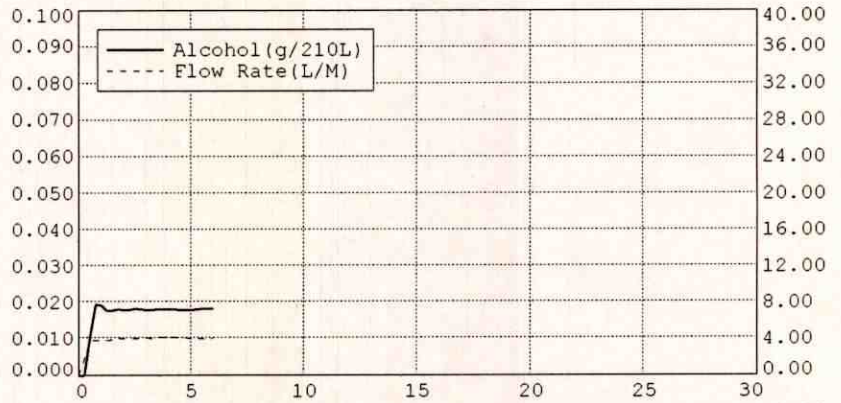
Date: 05/25/2021
Time: 09:43:03

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.80: 0.020
LOT #: AG928203
EXPIRATION: 10/09/2021
TANK PRESSURE: 514 psi

BLANK TEST	0.000	09:44
INTERNAL STANDARD	VERIFIED	09:44
EXTERNAL STANDARD	0.019	09:44
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.020	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.020	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.020	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.020	09:48
BLANK TEST	0.000	09:49

Average = 0.0198
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100699

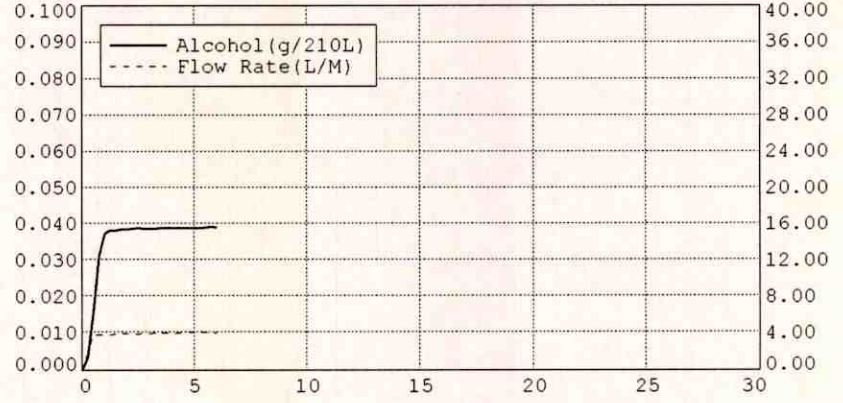
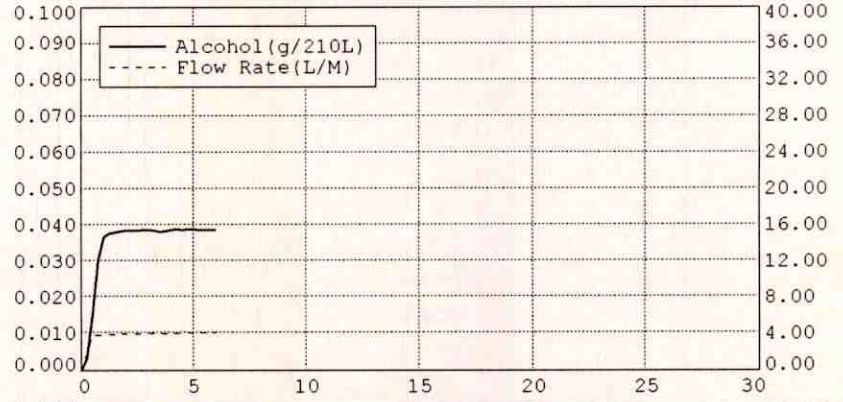
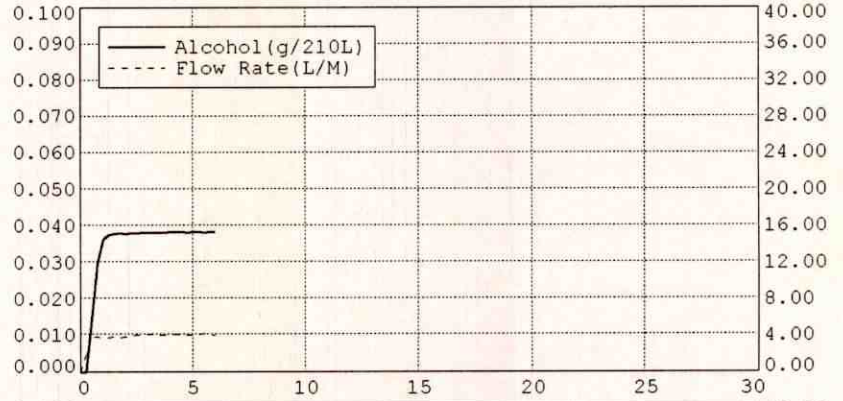
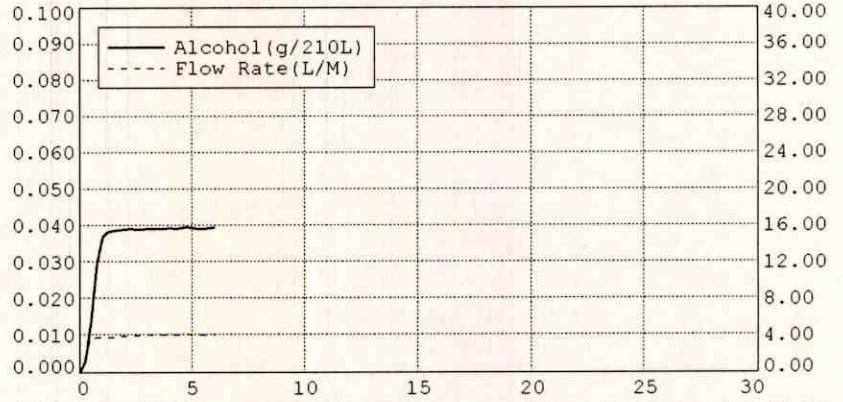
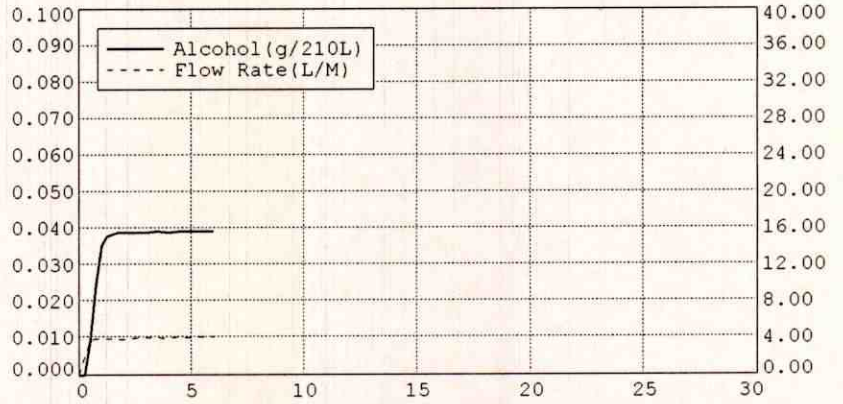
Date: 05/25/2021
Time: 09:51:03

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.80: 0.040
LOT #: AG915607
EXPIRATION: 06/05/2021
TANK PRESSURE: 491 psi

BLANK TEST	0.000	09:52
INTERNAL STANDARD	VERIFIED	09:52
EXTERNAL STANDARD	0.040	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.040	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.040	09:54
BLANK TEST	0.000	09:55
EXTERNAL STANDARD	0.040	09:55
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.041	09:56
BLANK TEST	0.000	09:57

Average = 0.0402
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

 Alaska Department of Public Safety
 DATAMASTER dmt: 100699

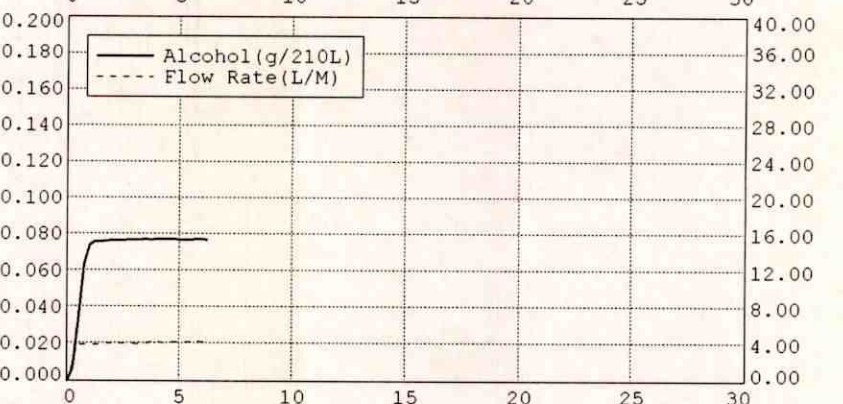
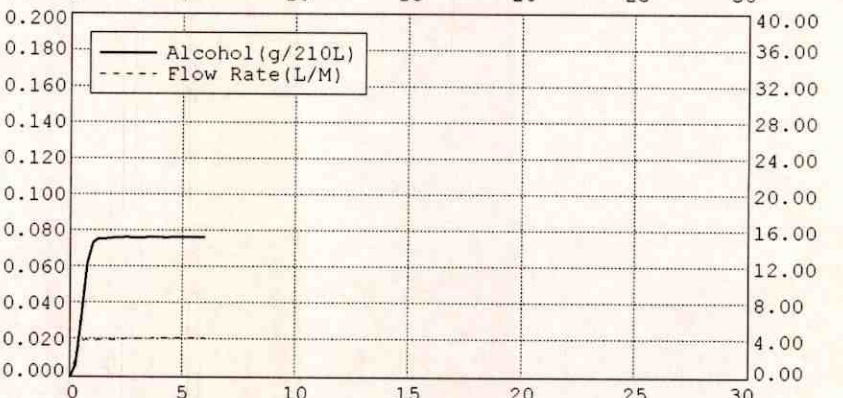
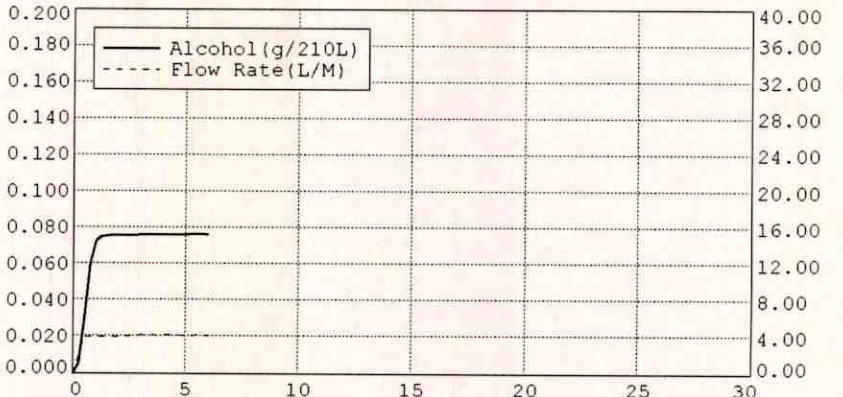
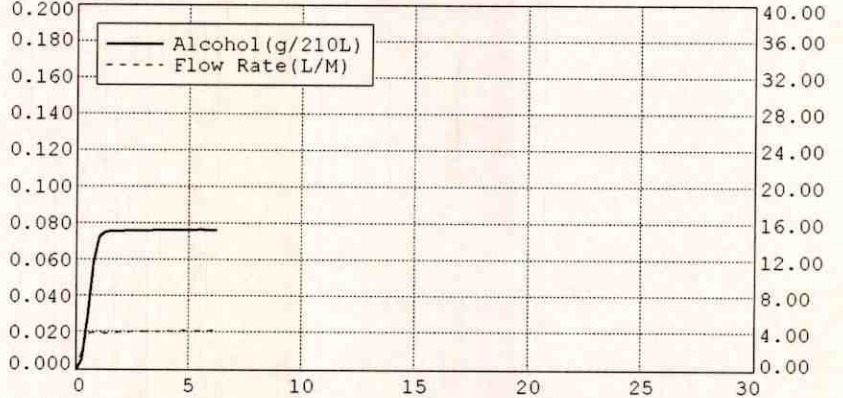
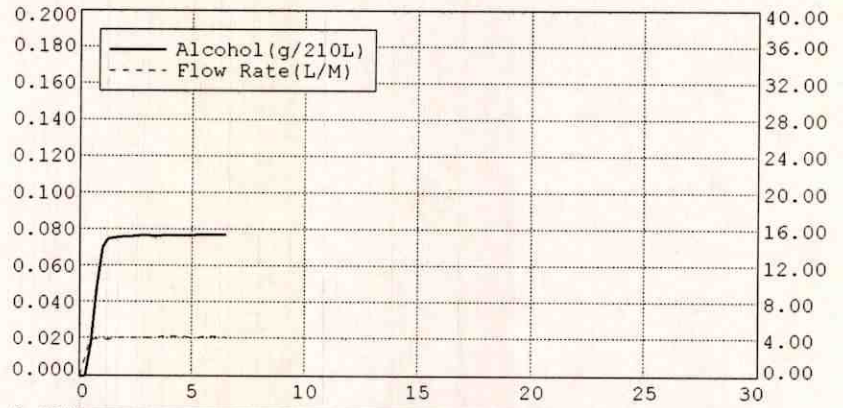
Date: 05/25/2021
 Time: 09:59:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.79: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 596 psi

BLANK TEST	0.000	10:00
INTERNAL STANDARD	VERIFIED	10:00
EXTERNAL STANDARD	0.078	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.077	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.078	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.078	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.079	10:05
BLANK TEST	0.000	10:06

Average = 0.0780
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100699

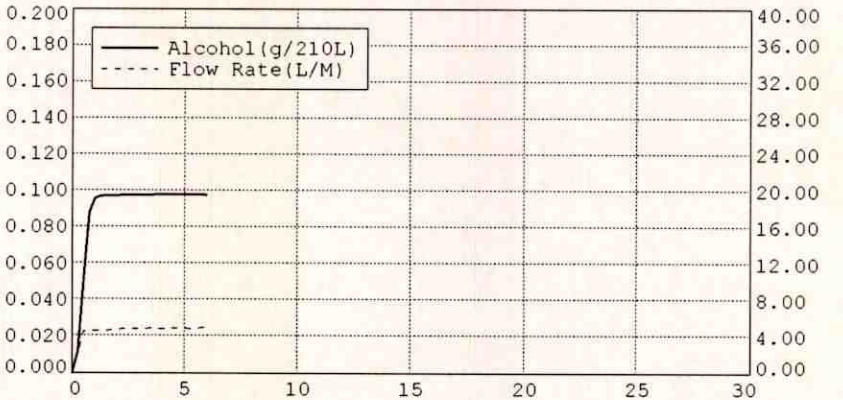
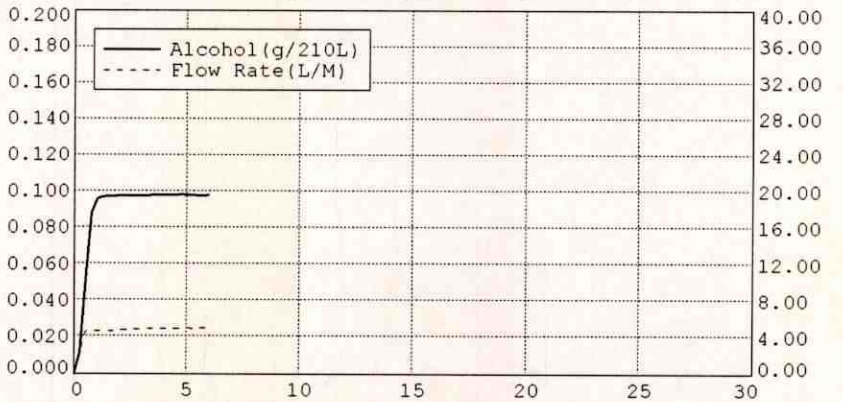
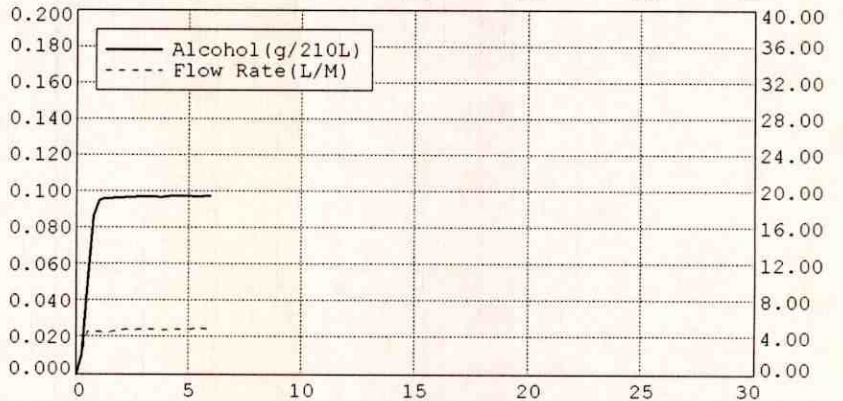
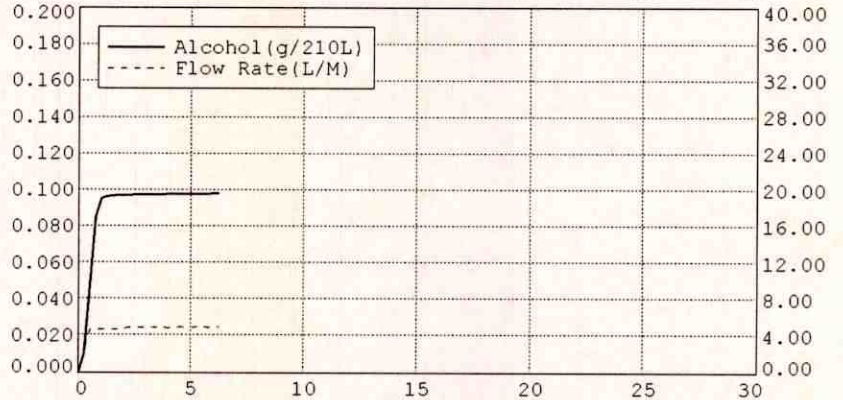
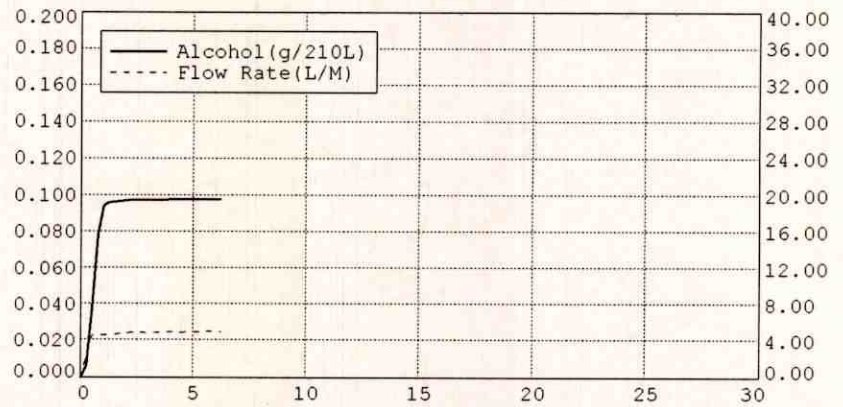
Date: 05/25/2021
 Time: 10:08:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.79: 0.100
 LOT #: AG108404
 EXPIRATION: 03/25/2023
 TANK PRESSURE: 1121 psi

BLANK TEST	0.000	10:10
INTERNAL STANDARD	VERIFIED	10:10
EXTERNAL STANDARD	0.099	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.099	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.098	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.099	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.098	10:14
BLANK TEST	0.000	10:15

Average = 0.0986
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

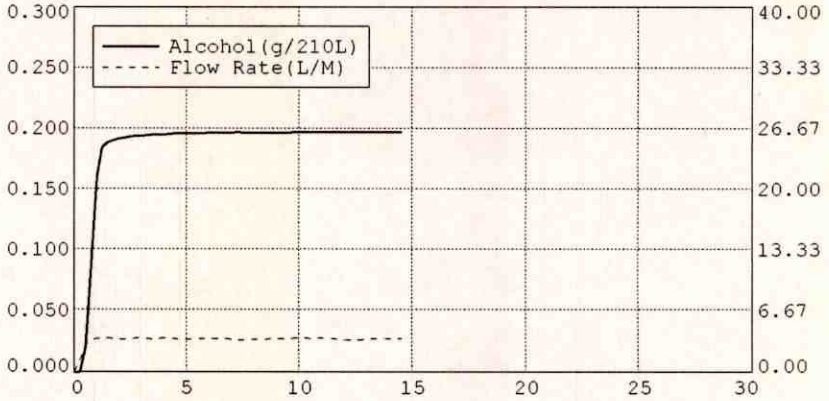
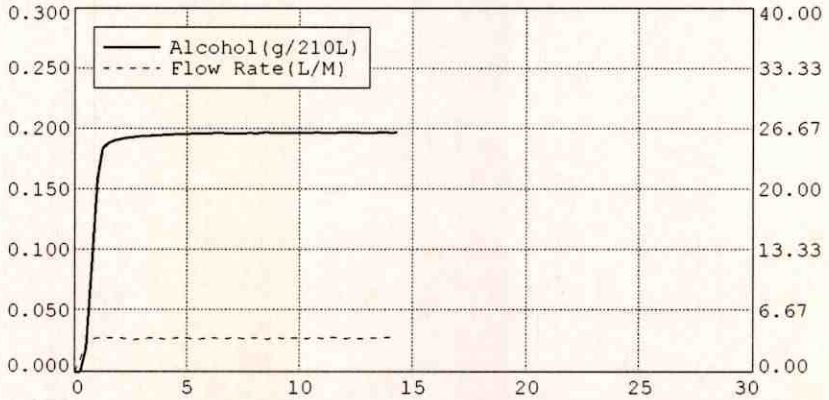
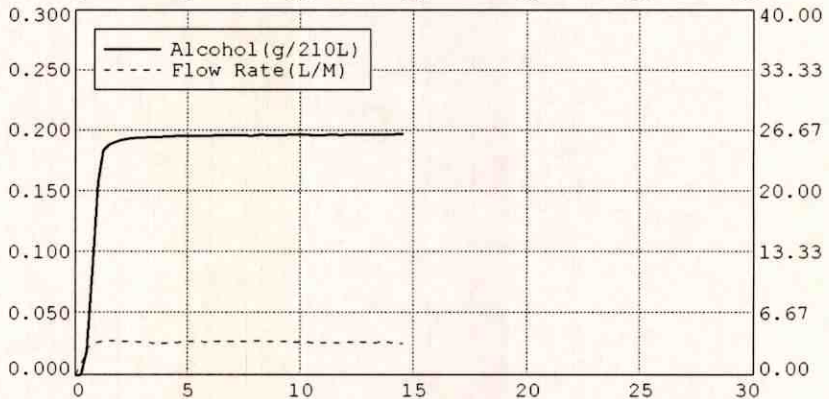
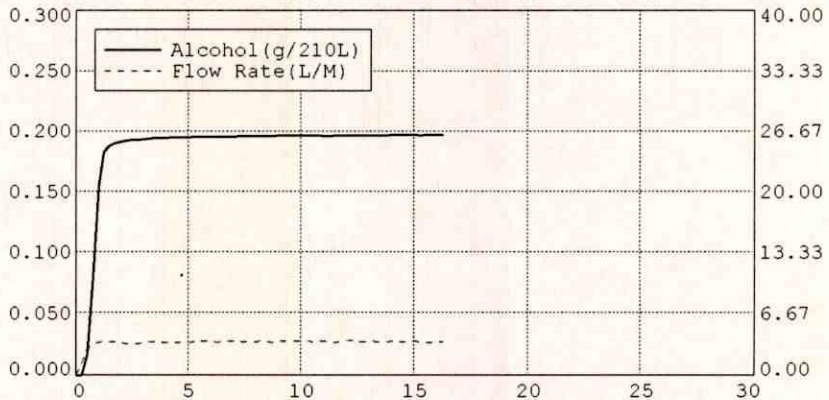
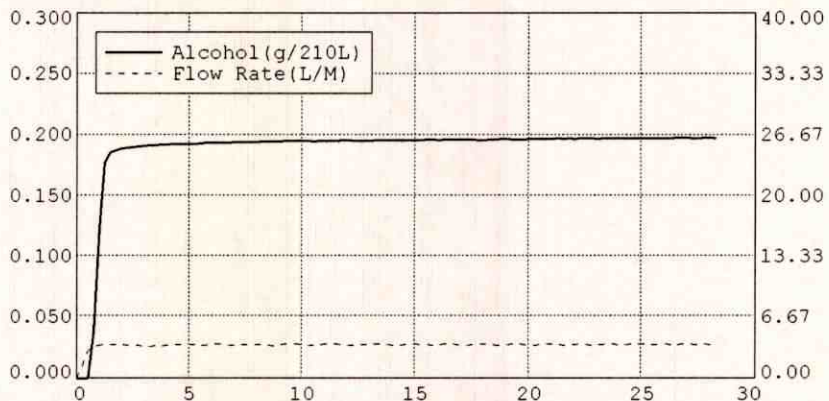
Alaska Department of Public Safety
 DATAMASTER dmt: 100699

Date: 05/25/2021
 Time: 10:27:00

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 19200
 EXPIRATION: 08/06/2021

BLANK TEST	0.000	10:28
INTERNAL STANDARD	VERIFIED	10:28
EXTERNAL STANDARD	0.199	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.198	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.198	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.198	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.198	10:33
BLANK TEST	0.000	10:34

Average = 0.1982
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

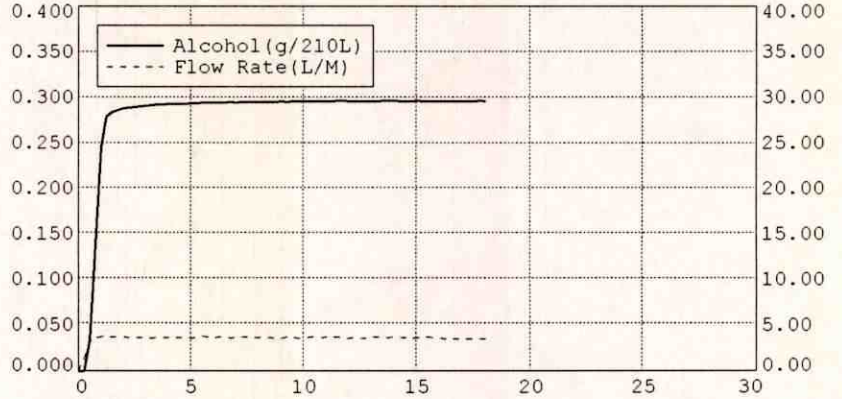
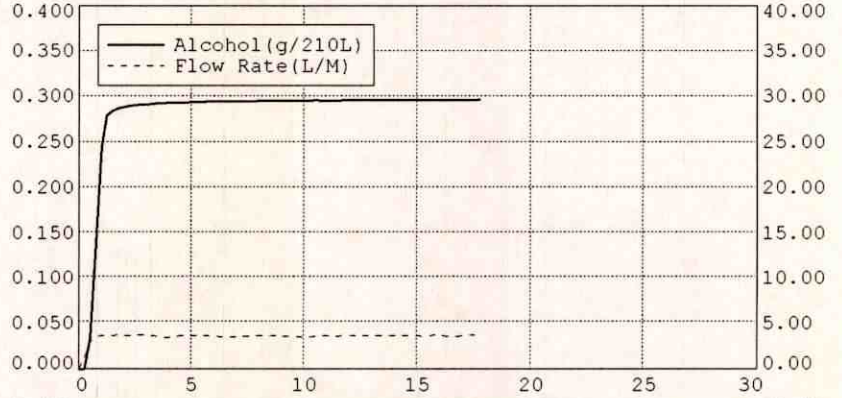
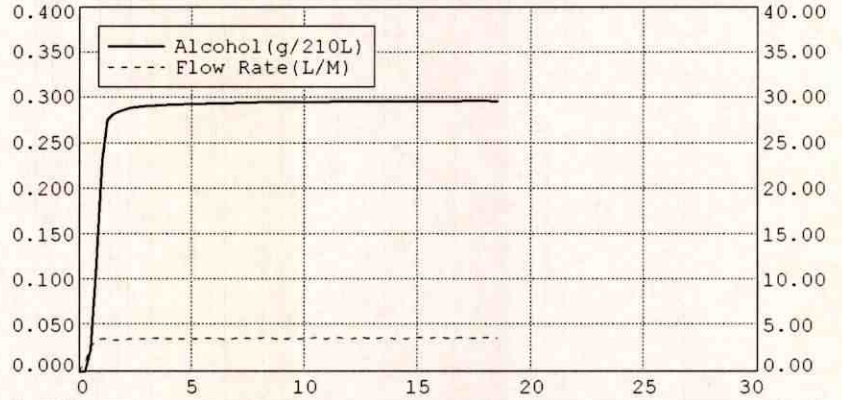
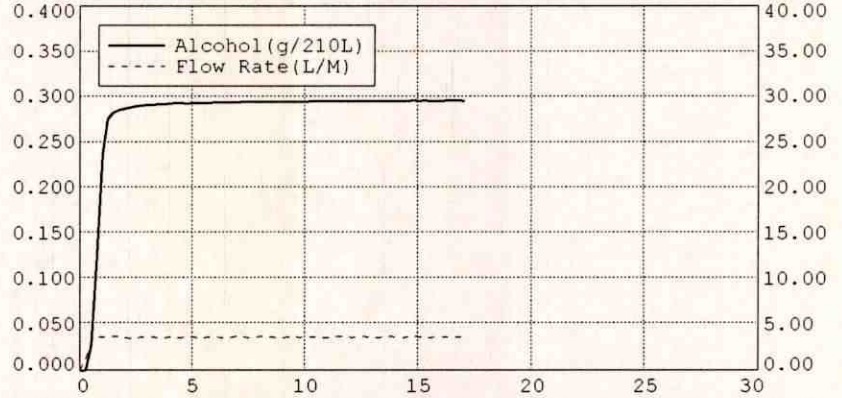
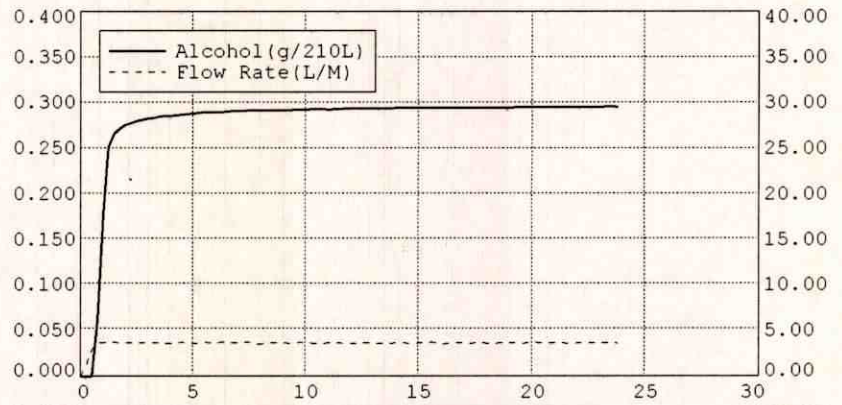
Alaska Department of Public Safety
 DATAMASTER dmt: 100699

Date: 05/25/2021
 Time: 10:47:21

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 19330
 EXPIRATION: 11/13/2021

BLANK TEST	0.000	10:48
INTERNAL STANDARD	VERIFIED	10:48
EXTERNAL STANDARD	0.296	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.296	10:50
BLANK TEST	0.000	10:51
EXTERNAL STANDARD	0.297	10:51
BLANK TEST	0.000	10:52
EXTERNAL STANDARD	0.296	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.296	10:54
BLANK TEST	0.000	10:55

Average = 0.2962
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 11:07:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *Daw*
CARLIE BAILEY
OPERATOR'S #: 10436

DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

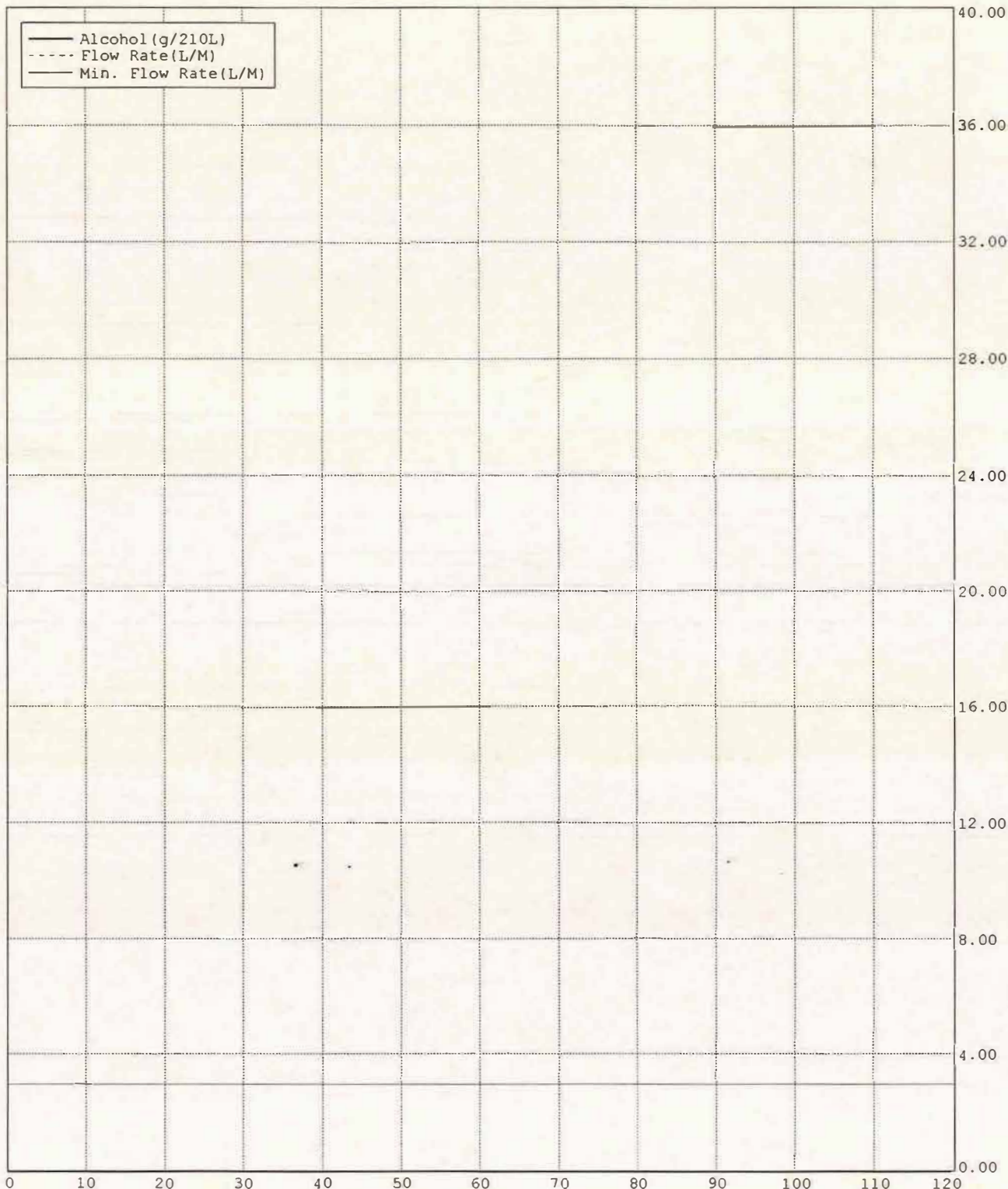
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080

DIAGNOSTIC CHECK	PASSED	11:08
BLANK TEST	0.000	11:08
INTERNAL STANDARD	VERIFIED	11:08
EXTERNAL STANDARD	0.078	11:08
BLANK TEST	0.000	11:09
SUBJECT SAMPLE	INCOMPLETE	11:11

AG018102
Exp. 06/29/2022
CKB 6/7/2021

Daw

CKB Daw



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 12:33:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *DBW*
CARLIE BAILEY
OPERATOR'S #: 10436

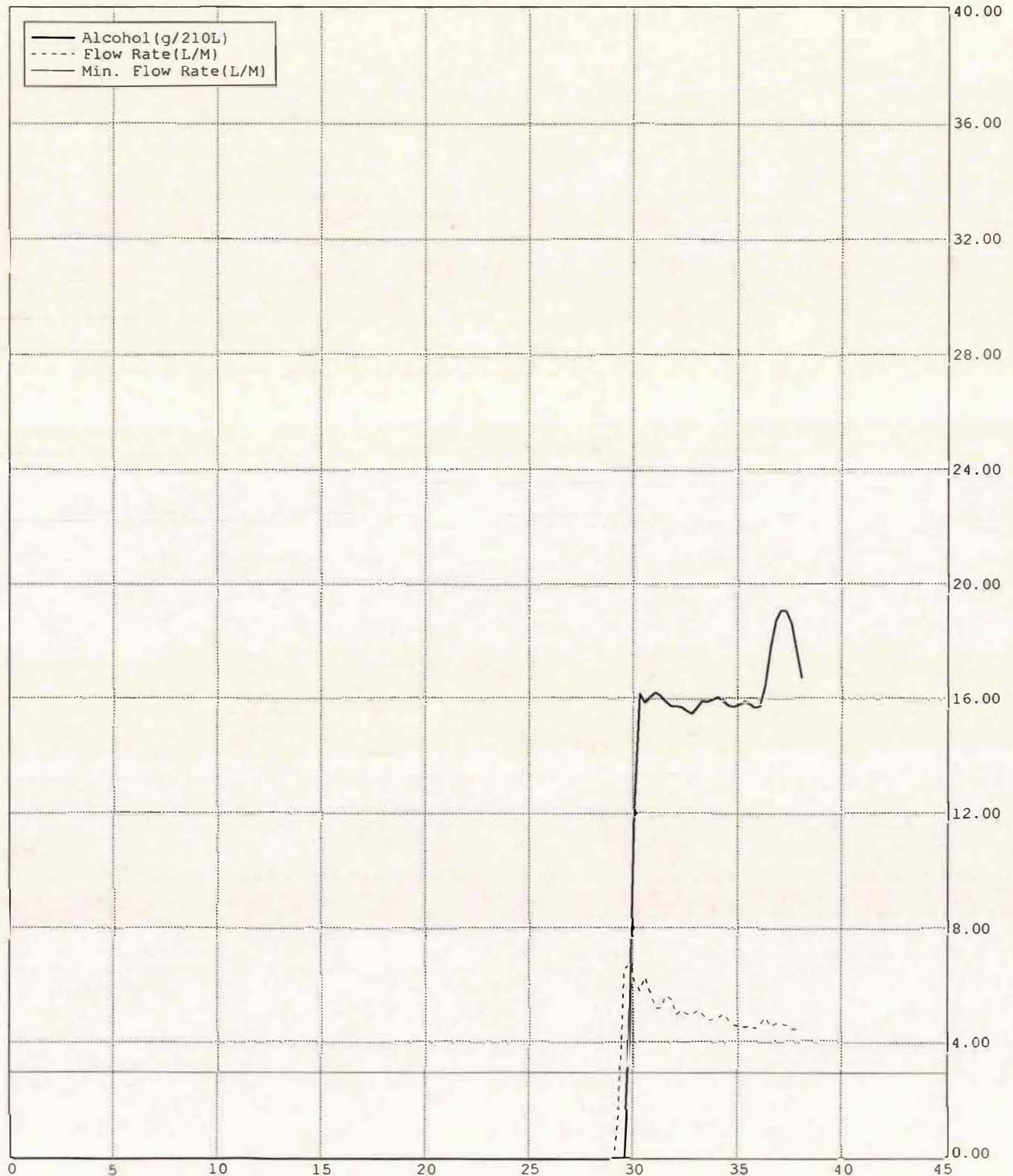
DEPT/AGENCY:
INVALID
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:34
BLANK TEST	0.000	12:34
INTERNAL STANDARD	VERIFIED	12:35
EXTERNAL STANDARD	0.079	12:35
BLANK TEST	0.000	12:36
SUBJECT SAMPLE	INVALID	12:36

DBW *DBW*



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 13:17:59

AG018102
Exp. 06/29/2022
CKB 6/7/2021
Daw

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *Daw*
CARLIE BAILEY
OPERATOR'S #: 10436

DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080

DIAGNOSTIC CHECK	PASSED	13:19
BLANK TEST	0.000	13:19
INTERNAL STANDARD	VERIFIED	13:19
Xq = 0.080 (1.32%)		
EXTERNAL STANDARD	0.078	13:19
X[1] = 0.0779 (-0.0009) (0.0021)		
BLANK TEST	0.000	13:20
SUBJECT SAMPLE	XXX	13:21
X[1] = 0.1101 (-0.0160) (0.0016)		

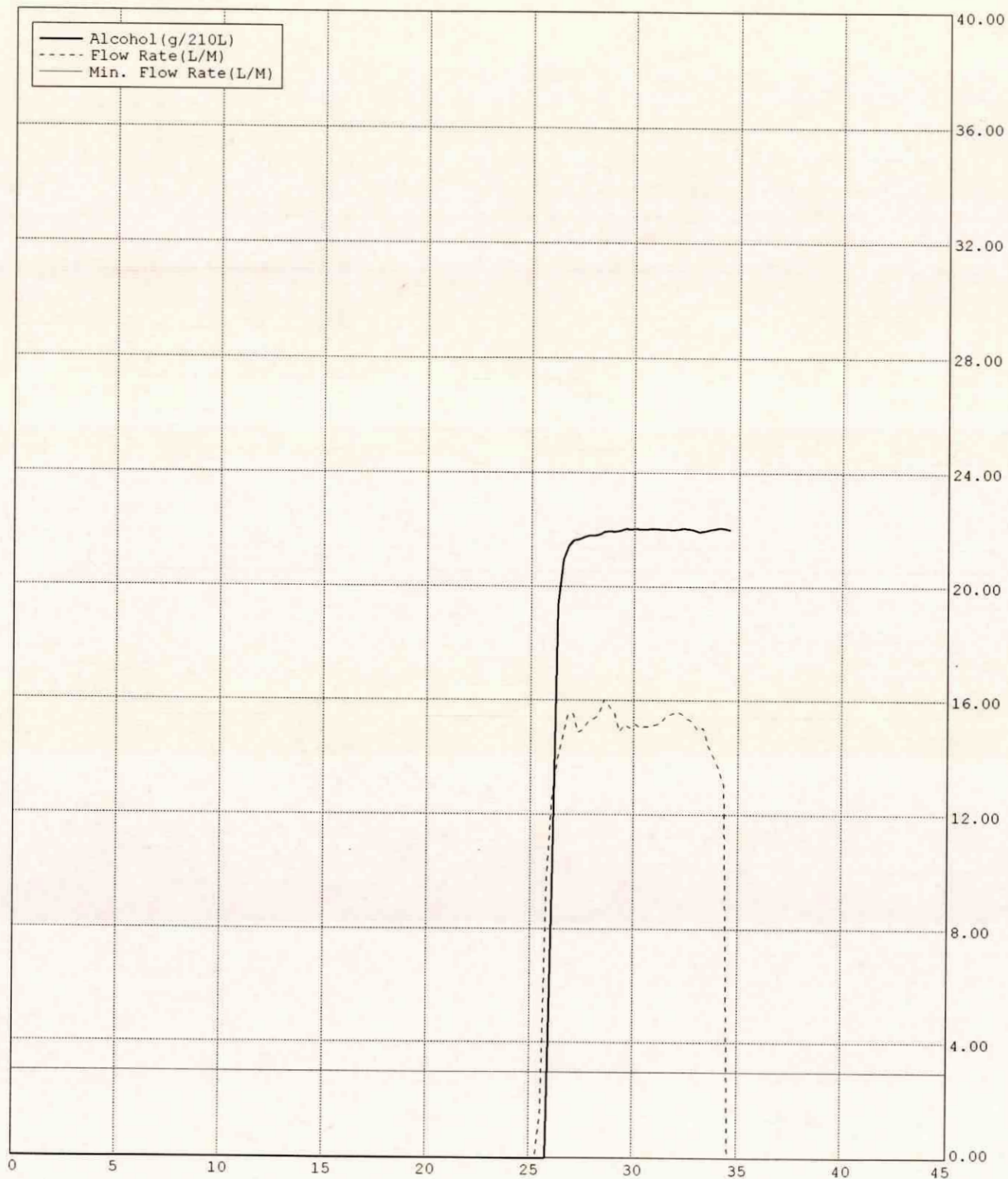
Interference Detected

Filter 2 Avg: -0.0011

Filter 3 Avg: 0.0014

CKB 5/25/2021
Daw

CKB *Daw*



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 13:05:39

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *DJW*
CARLIE BAILEY
OPERATOR'S #: 10436

DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

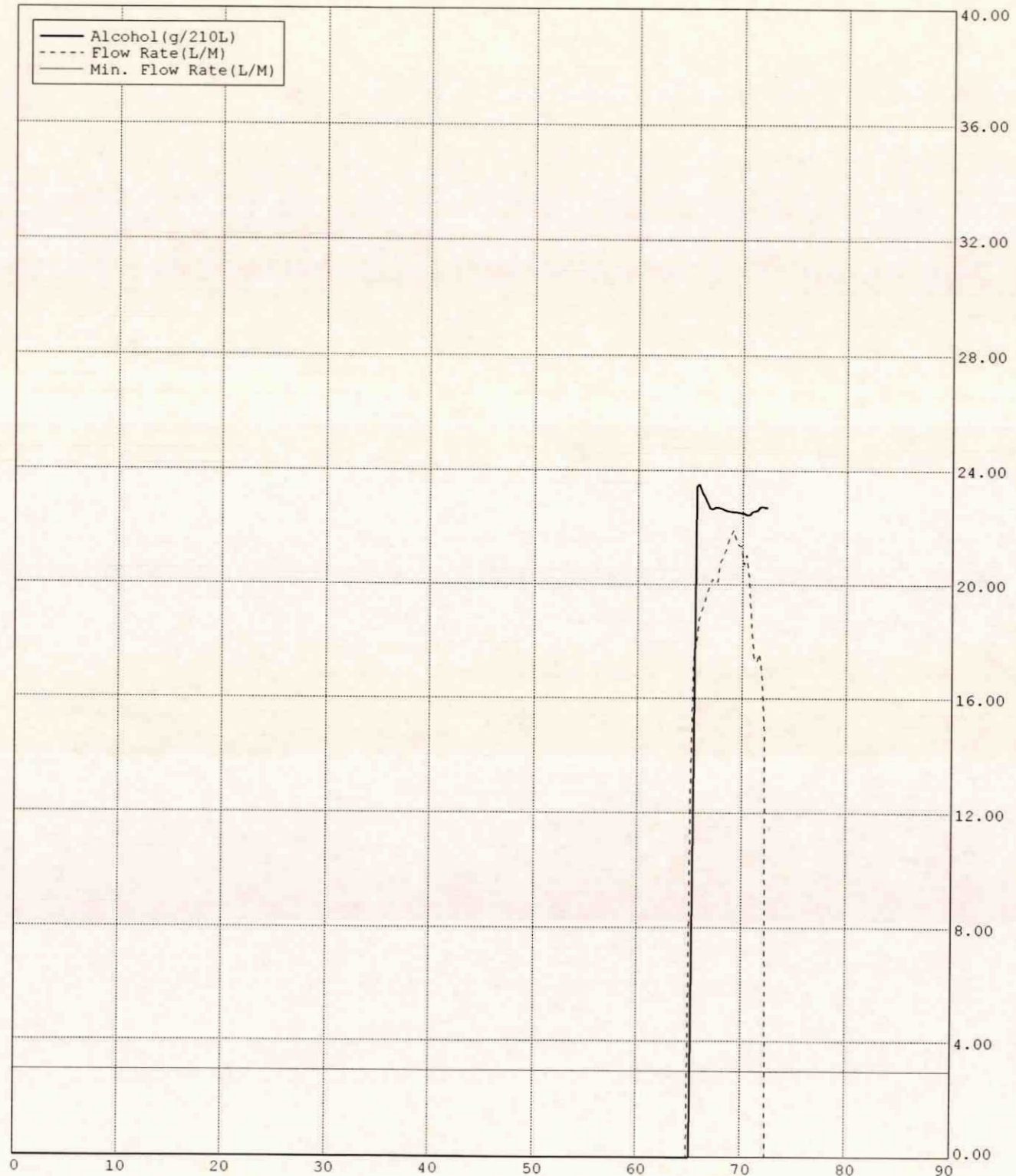
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080

DIAGNOSTIC CHECK	PASSED	13:06
BLANK TEST	0.000	13:06
INTERNAL STANDARD	VERIFIED	13:06
Xq = 0.079 (0.77%)		
EXTERNAL STANDARD	0.077	13:07
X[1] = 0.0775 (-0.0010) (0.0023)		
BLANK TEST	0.000	13:08
SUBJECT SAMPLE	XXX	13:09
X[1] = 0.1137 (-0.0284) (0.0010)		

Interference Detected

AG018102
Exp. 06/29/2022
CKB 6/7/2021
DJW

CKB DJW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 12:51:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *Daw*
CARLIE BAILEY
OPERATOR'S #: 10436

DEPT/AGENCY:
INTERFERENCE NEGATIVE CONTROL
CASE/REPORT: XXXX
TEST TYPE: TEST

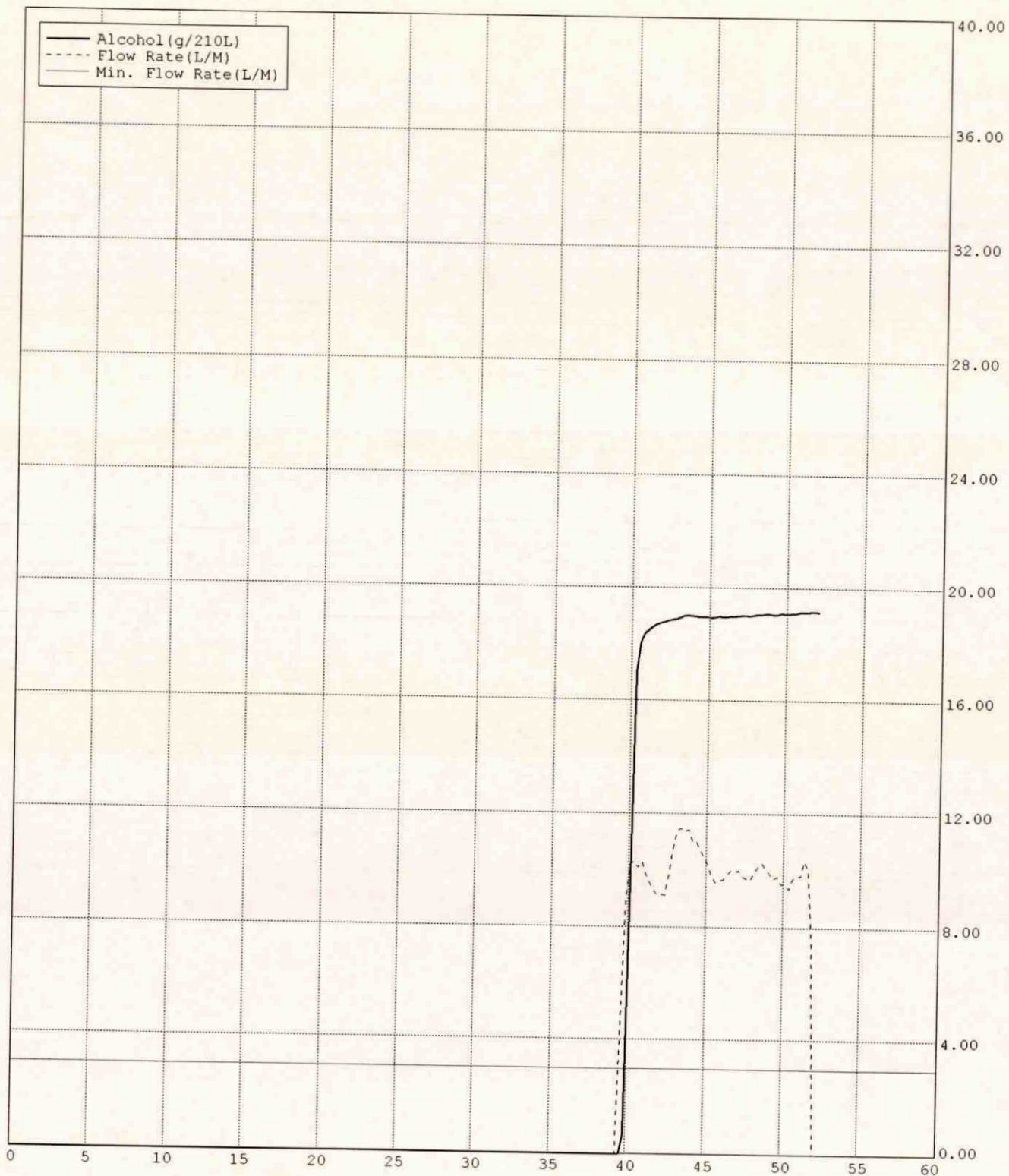
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080

DIAGNOSTIC CHECK	PASSED	12:53
BLANK TEST	0.000	12:53
INTERNAL STANDARD	VERIFIED	12:53
Xq = 0.080 (1.65%)		
EXTERNAL STANDARD	0.078	12:53
X[1] = 0.0780 (-0.0006) (0.0016)		
BLANK TEST	0.000	12:54
SUBJECT SAMPLE (Vol=2.07L)	0.096	12:55
X[1] = 0.0969 (-0.0003) (0.0007)		
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.077	12:56
X[1] = 0.0774 (-0.0019) (-0.0003)		
BLANK TEST	0.000	12:57

AG018102
Exp. 06/29/2022
CKB 6/7/2021

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SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 12:24:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *DJW*
CARLIE BAILEY
OPERATOR'S #: 10436

DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

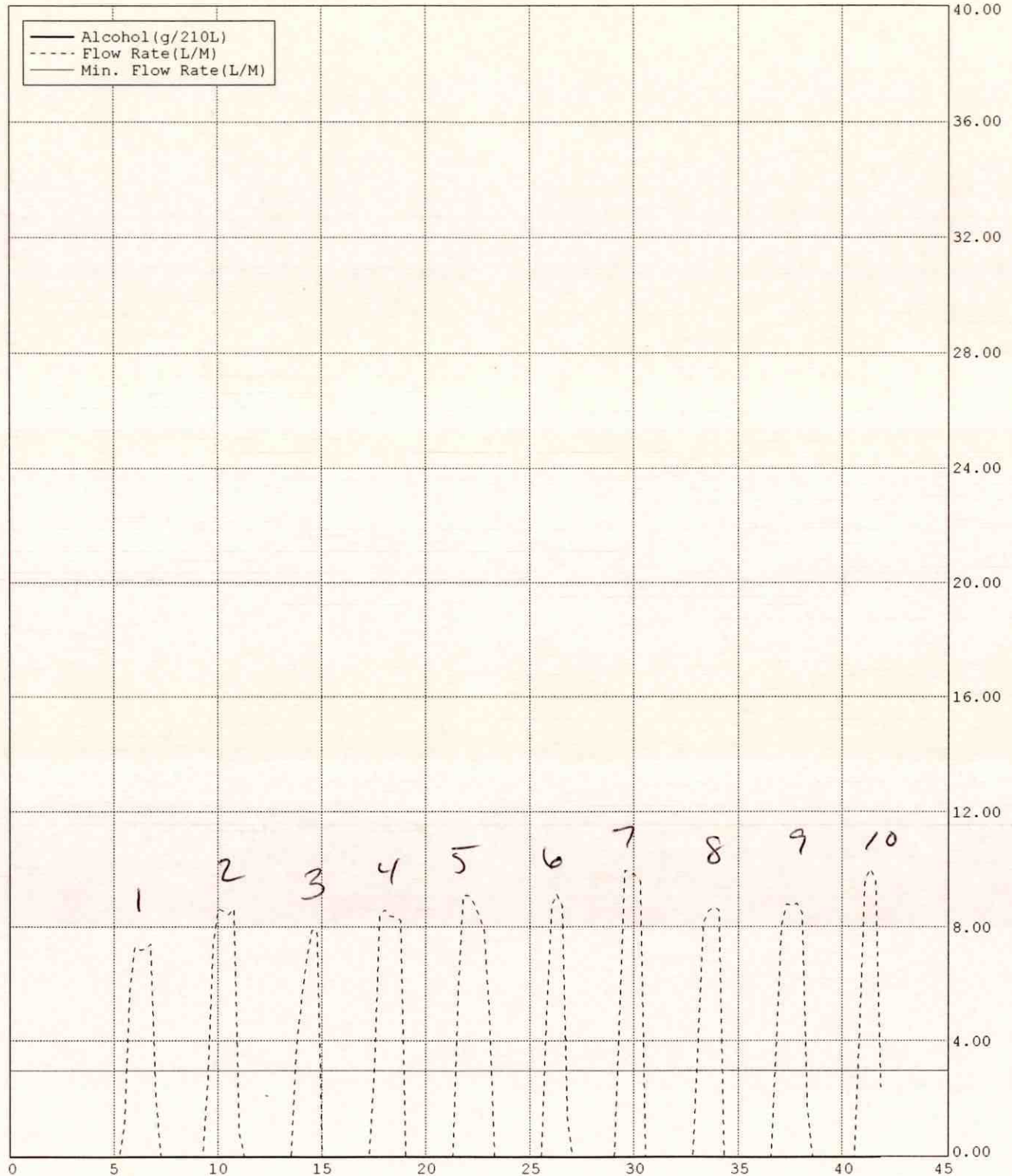
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080

DIAGNOSTIC CHECK	PASSED	12:25
BLANK TEST	0.000	12:25
INTERNAL STANDARD	VERIFIED	12:26
EXTERNAL STANDARD	0.078	12:26
BLANK TEST	0.000	12:27
SUBJECT SAMPLE	XXX	12:27

Maximum Attempts Exceeded

AG018102
Exp. 06/29/2022
CKB 6/7/2021
DJW

CKB DJW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 12:41:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *DMW*
CARLIE BAILEY
OPERATOR'S #: 10436

DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080

DIAGNOSTIC CHECK	PASSED	12:42
BLANK TEST	0.000	12:42
INTERNAL STANDARD	VERIFIED	12:42
EXTERNAL STANDARD	0.078	12:43
BLANK TEST	0.000	12:43

RFI DETECTED

AG018102
Exp. 06/29/2022
CKB 6/7/2021
DMW

CKB DMW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/25/2021
Time: 13:46:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *DMW*
CARLIE BAILEY
OPERATOR'S #: 10436

DEPT/AGENCY:
NON-DRINKING SUBJECT TEST
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.74: 0.080

DIAGNOSTIC CHECK	PASSED	13:48
BLANK TEST	0.000	13:48
INTERNAL STANDARD	VERIFIED	13:48
EXTERNAL STANDARD	0.078	13:48
BLANK TEST	0.000	13:49
SUBJECT SAMPLE (Vol=1.86L)	0.000	13:50
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.078	13:51
BLANK TEST	0.000	13:52

AG018102
Exp. 06/29/2022
CKB 6/7/2021

DMW

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