

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 100422 Analyst Carlie Bailey 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 AG-928203 Exp 10/9/2021
ii. 0.040g/210L Mnf Airgas Lot AG-915607 Exp 6/15/2021
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: 100422

Date: 05/25/2021
Time: 09:05:40

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.8°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.70 V PASSED
(1.02 V - 2.38 V)
Cooler Voltage = 1.82 V PASSED
(1.09 V - 2.55 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.929 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 = 0.124 0.29% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100422

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

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 46.5°C

Current Barometer 29.8 in
Volume (Ltr) 1.52

Settings

Lamp: 1.70 V
Bias: 80 V
Cooler: 1.75 V
Chopper: 526 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.027 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/19/2021
Time: 12:47:38

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

Ca	=	0.1000			
CAL	=	0.988319	0.800	<=	CAL < 1.200
b1	=	0.0007	0.0000	<=	b1 < 0.0040
b2	=	0.0079	0.0010	<=	b2 < 0.0100
b3	=	0.0008	0.0000	<=	b3 < 0.0040
Xq	=	0.1241	0.0500	<=	Xq < 0.2000
a21	=	1.218080	1.050	<=	a21 < 1.300
a31	=	0.415534	0.300	<=	a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 09:26:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

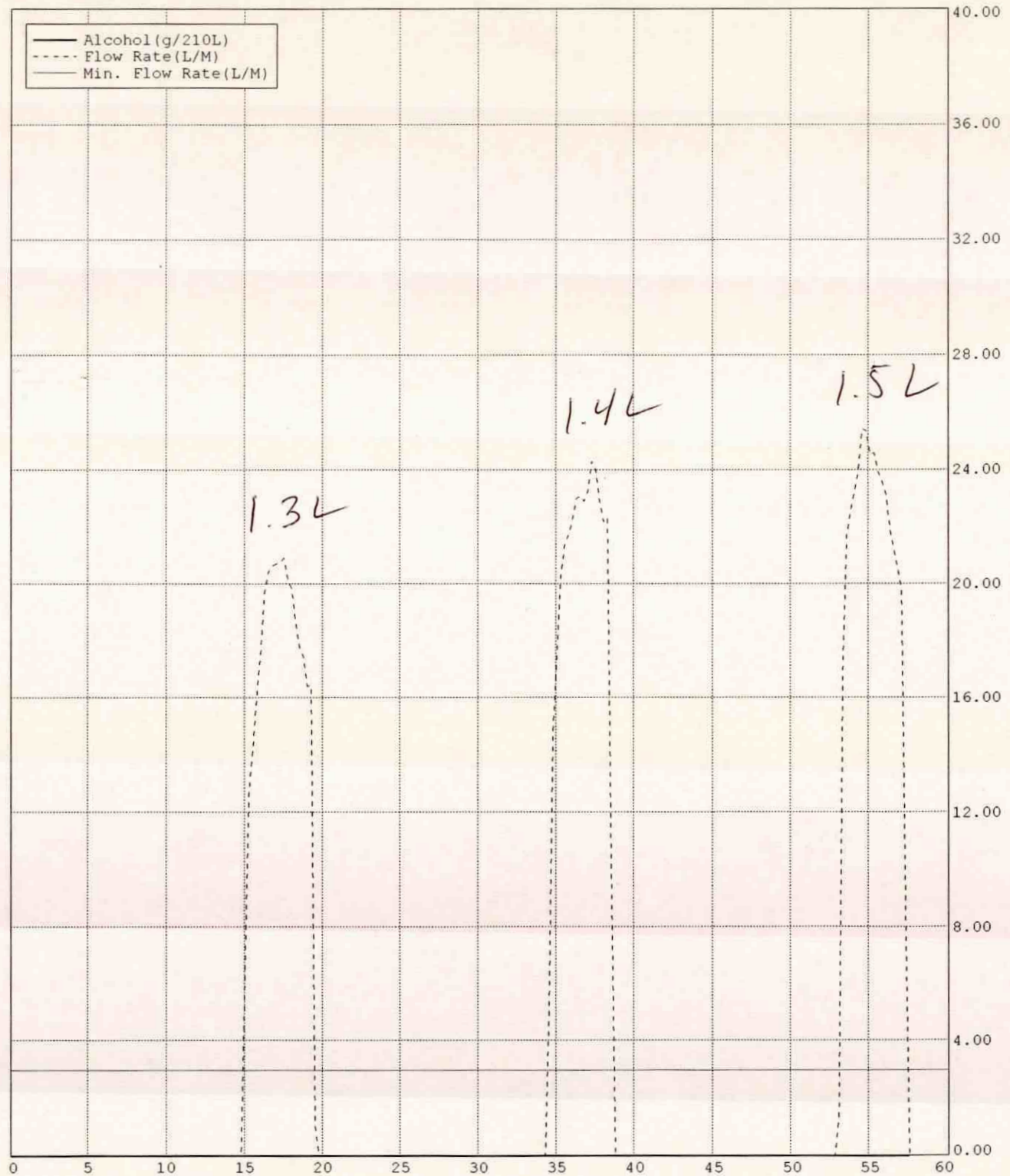
OPERATOR NAME: *Daw*
CARLIE BAILEY
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.80: 0.080

DIAGNOSTIC CHECK	PASSED	09:30
BLANK TEST	0.000	09:30
INTERNAL STANDARD	VERIFIED	09:30
EXTERNAL STANDARD	0.078	09:30
BLANK TEST	0.000	09:31
SUBJECT SAMPLE (Vol=1.55L)	0.000	09:33
BLANK TEST	0.000	09:34
EXTERNAL STANDARD	0.079	09:34
BLANK TEST	0.000	09:35

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



LINEARITY CHECK

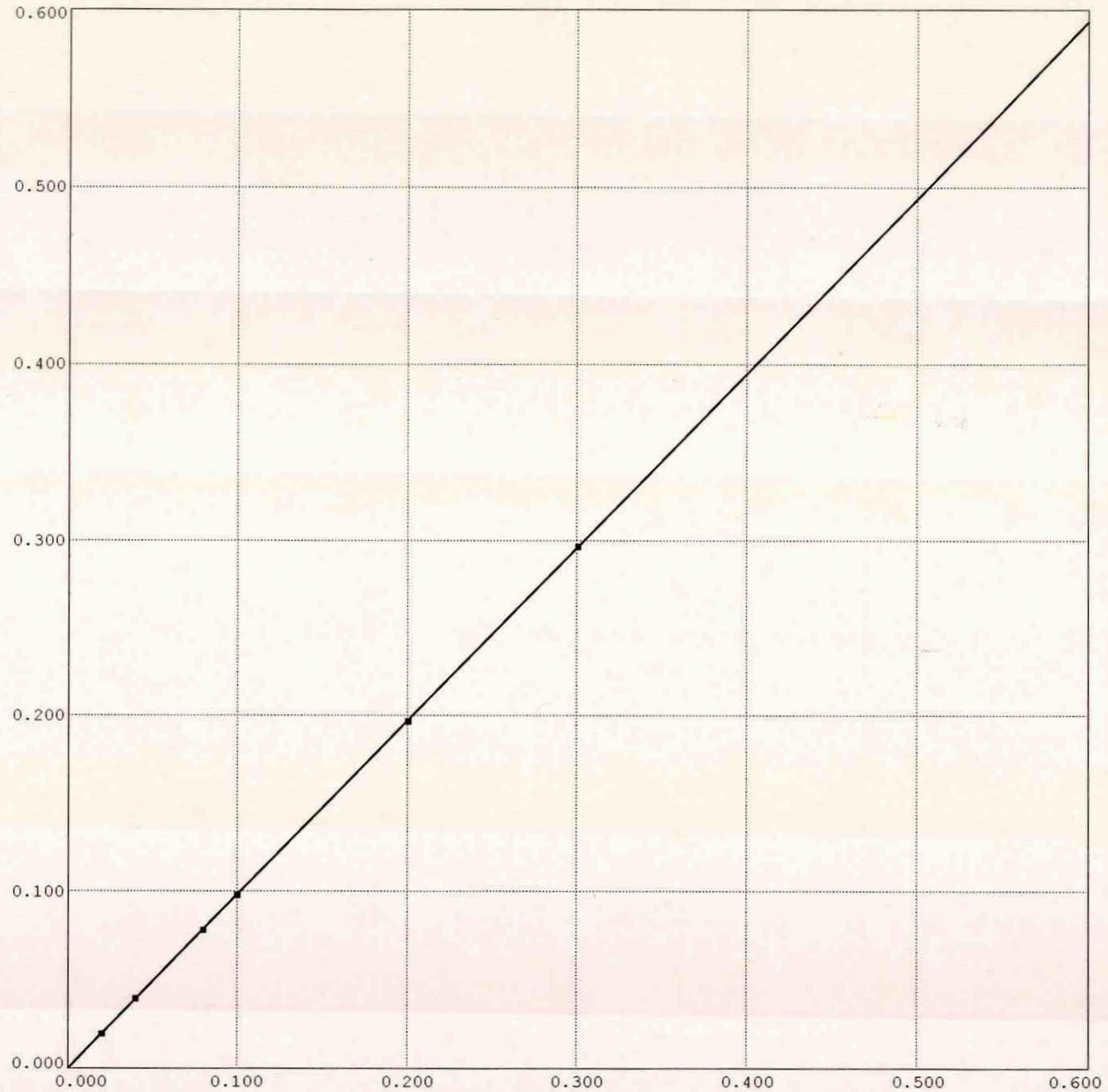
Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 09:45:35

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0400	0.0000
0.080	0.0790	0.0000
0.100	0.0988	0.0004
0.200	0.1974	0.0005
0.300	0.2972	0.0004

SLOPE = 0.989102
R² = 0.999989



RB DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100422

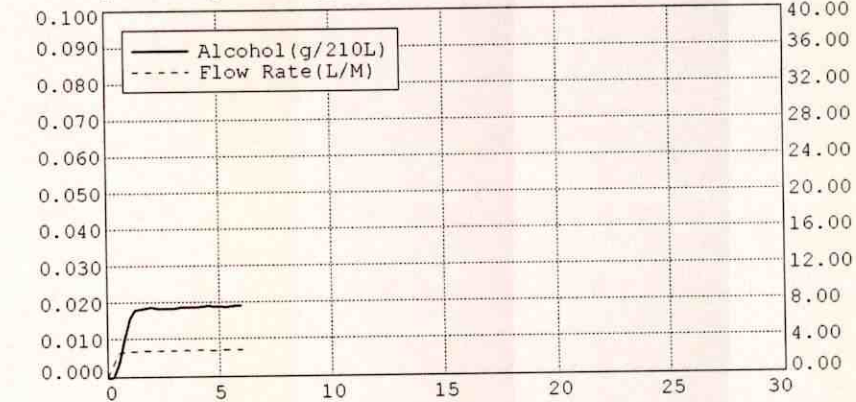
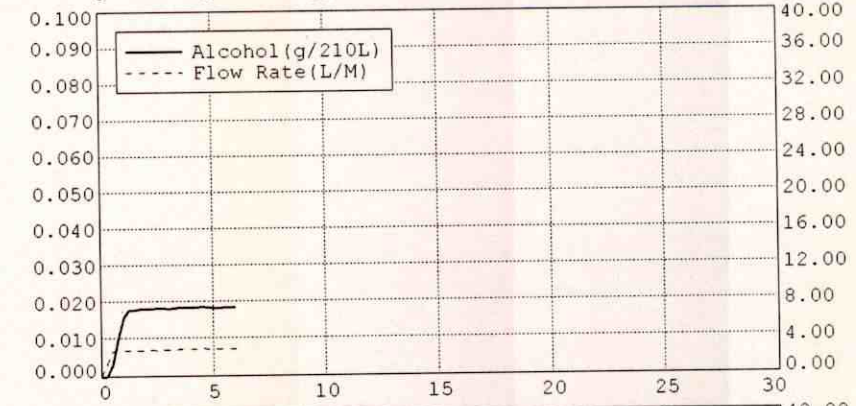
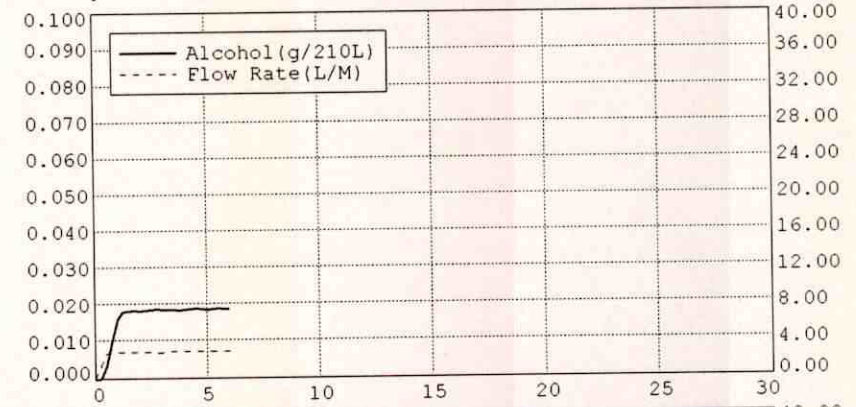
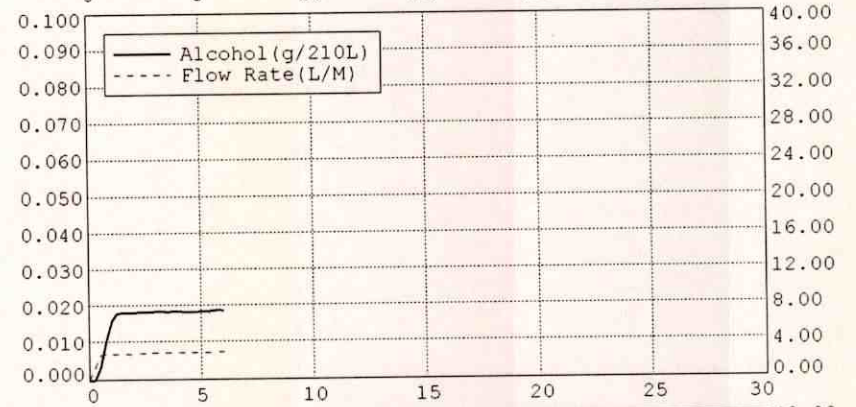
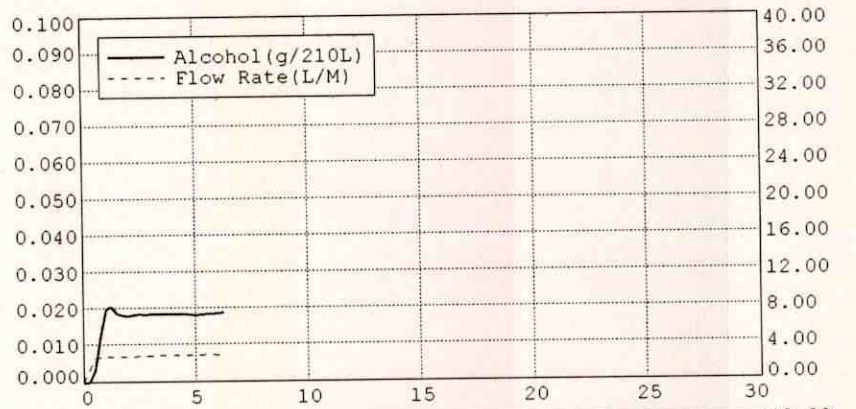
Date: 05/25/2021
 Time: 09:45:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.80: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 429 psi

BLANK TEST	0.000	09:47
INTERNAL STANDARD	VERIFIED	09:47
EXTERNAL STANDARD	0.020	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.020	09:49
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.020	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.020	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.020	09:52
BLANK TEST	0.000	09:53

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

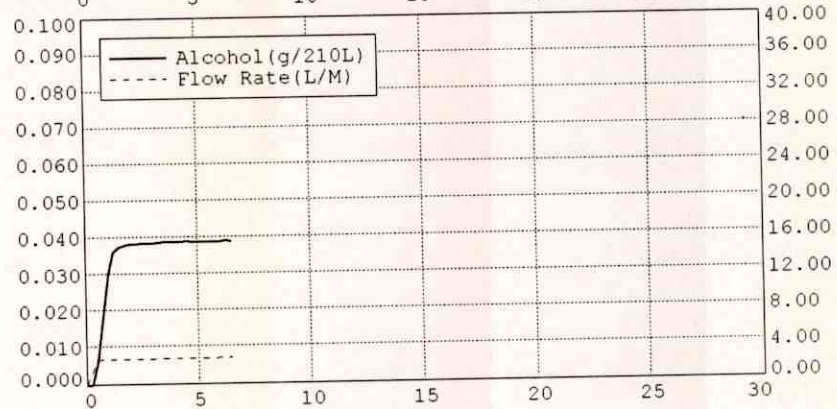
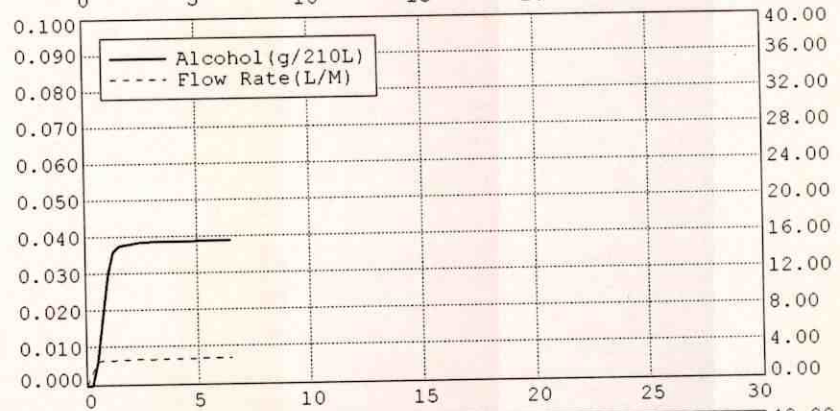
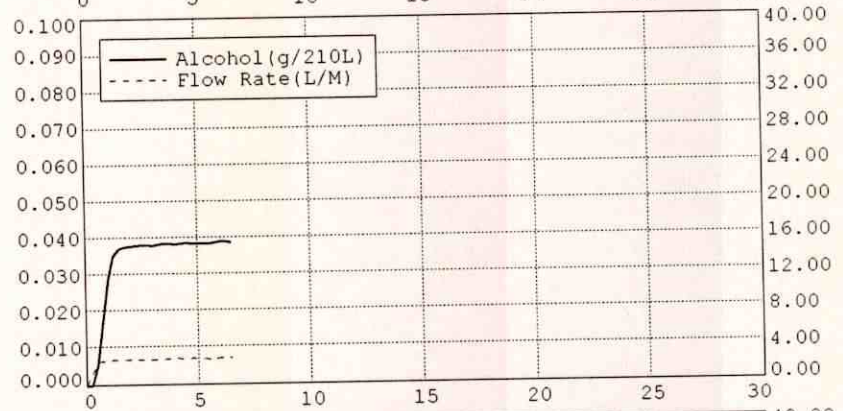
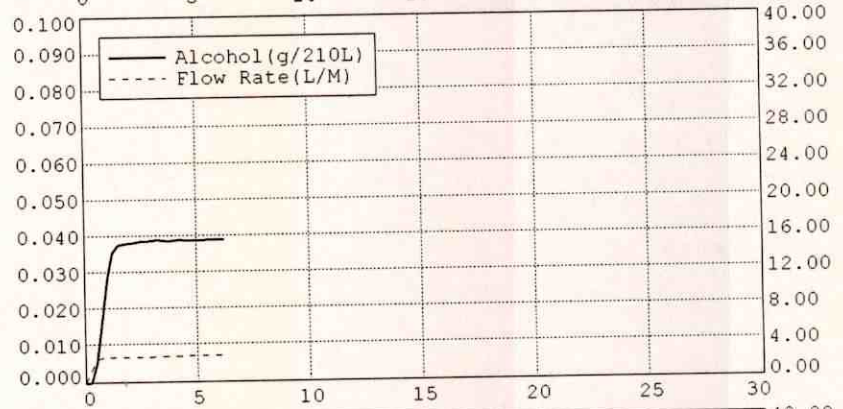
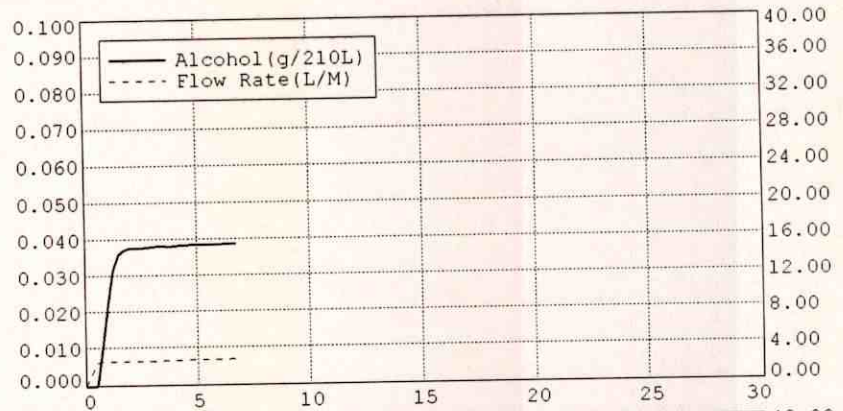
Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 09:54:30

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.040
TARGET AT 29.80: 0.040
LOT #: AG915607
EXPIRATION: 06/05/2021
TANK PRESSURE: 237 psi

BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:55
EXTERNAL STANDARD	0.040	09:55
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.040	09:57
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.040	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.040	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.040	10:00
BLANK TEST	0.000	10:01

Average = 0.0400
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100422

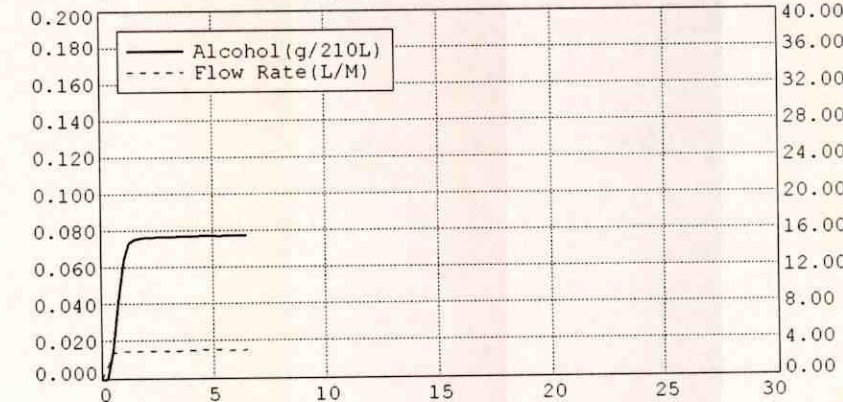
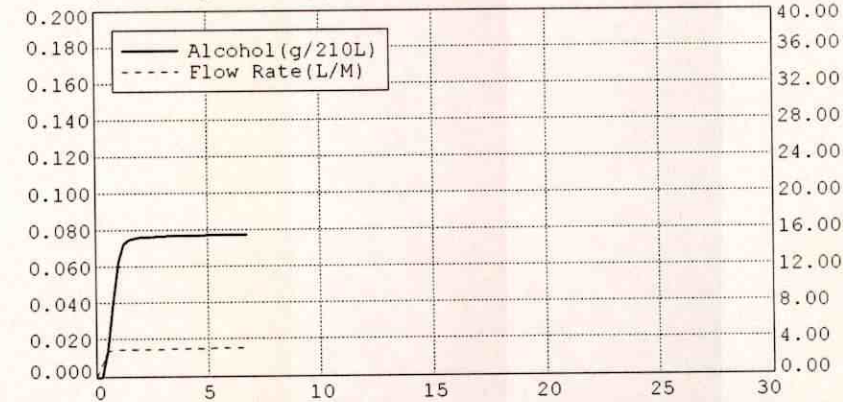
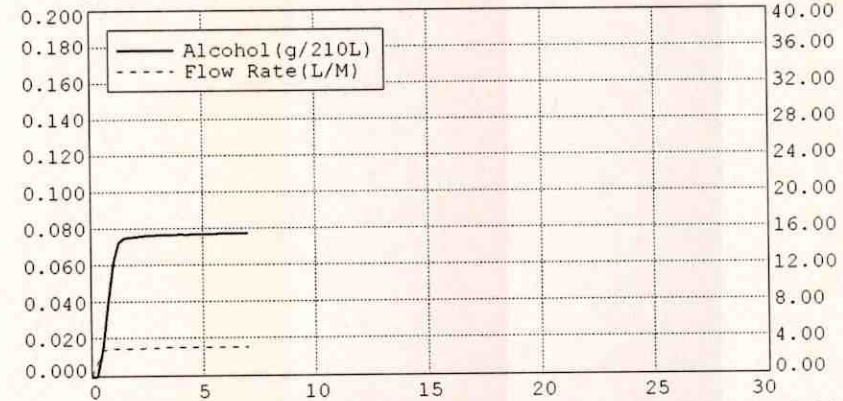
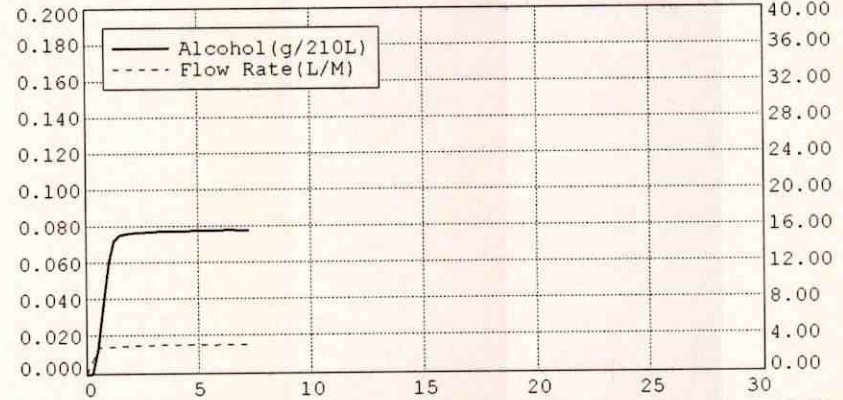
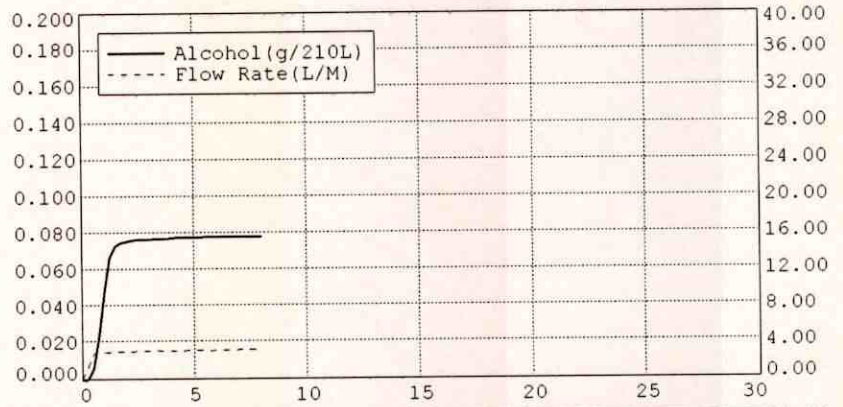
Date: 05/25/2021
 Time: 10:02:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.80: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 1147 psi

BLANK TEST	0.000	10:04
INTERNAL STANDARD	VERIFIED	10:04
EXTERNAL STANDARD	0.079	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.079	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.079	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.079	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.079	10:08
BLANK TEST	0.000	10:09

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

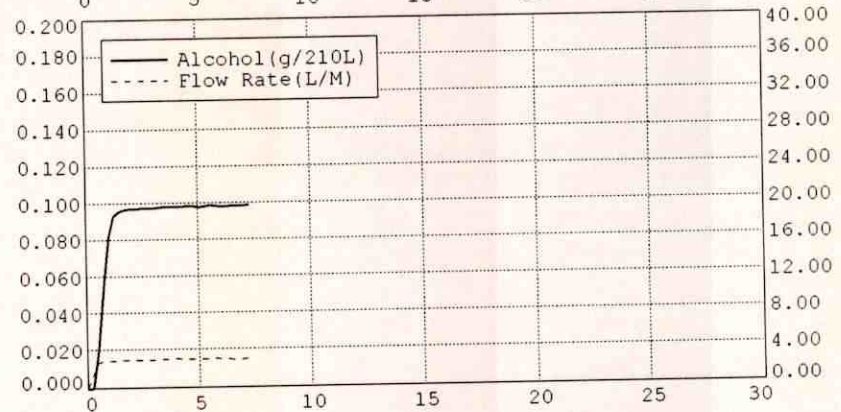
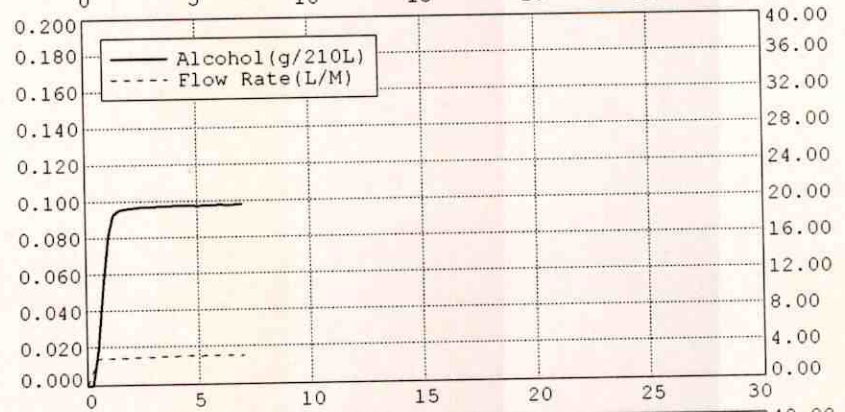
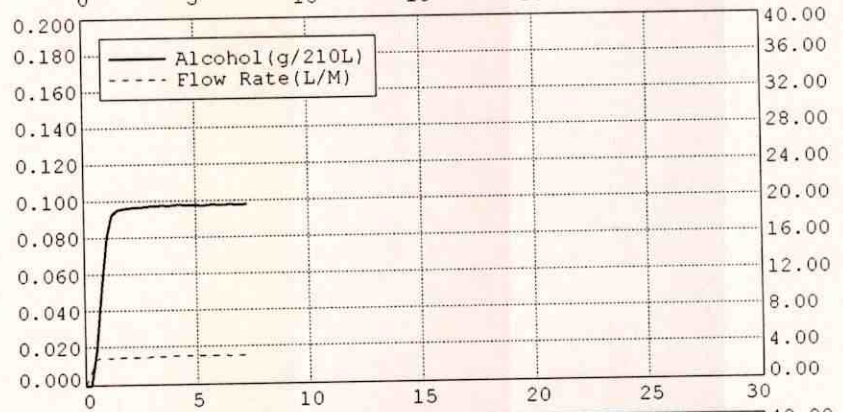
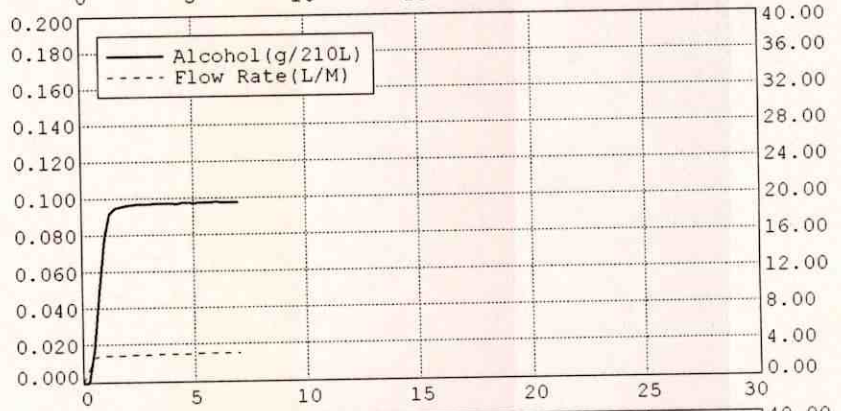
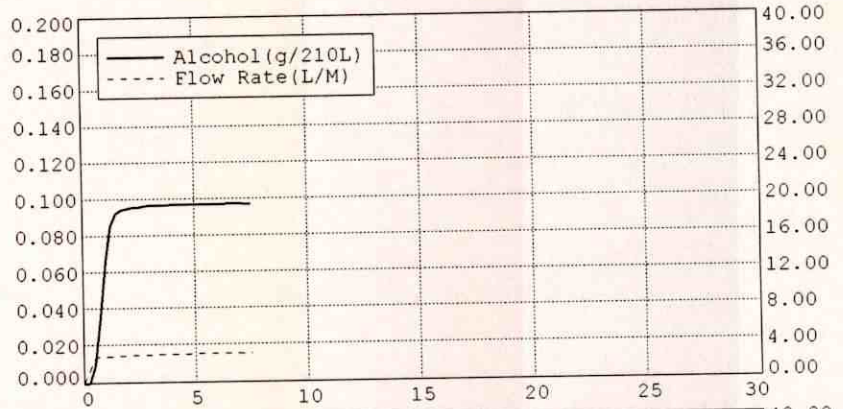
Alaska Department of Public Safety
 DATAMASTER dmt: 100422

Date: 05/25/2021
 Time: 10:11:52

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.100
 TARGET AT 29.78: 0.100
 LOT #: AG108404
 EXPIRATION: 03/25/2023
 TANK PRESSURE: 1120 psi

BLANK TEST	0.000	10:12
INTERNAL STANDARD	VERIFIED	10:13
EXTERNAL STANDARD	0.098	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.099	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.099	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.099	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.099	10:17
BLANK TEST	0.000	10:18

Average = 0.0988
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100422

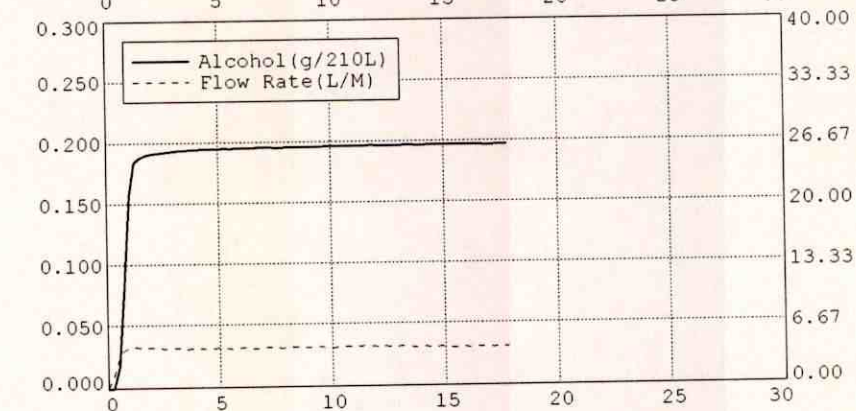
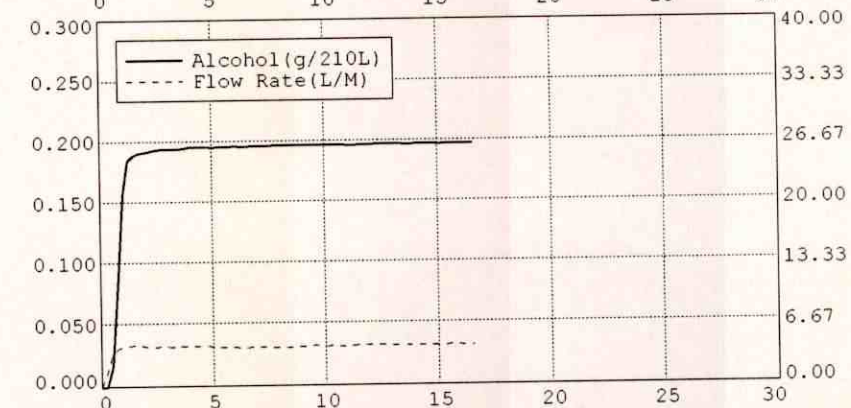
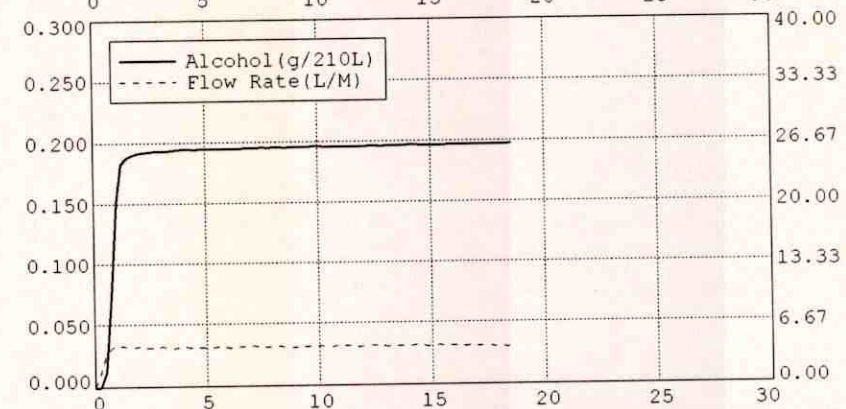
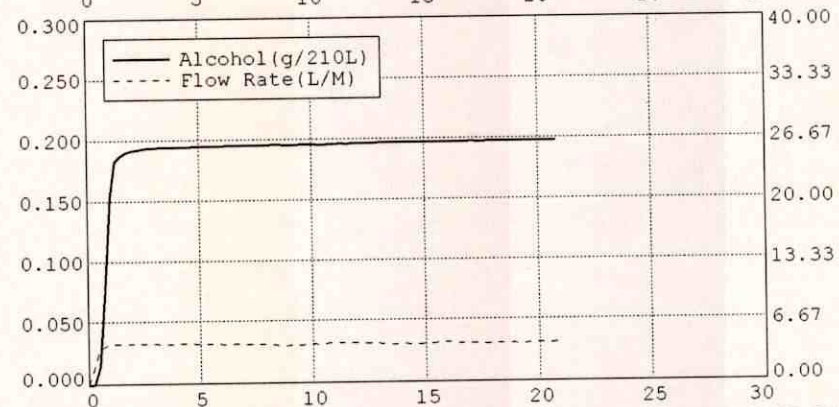
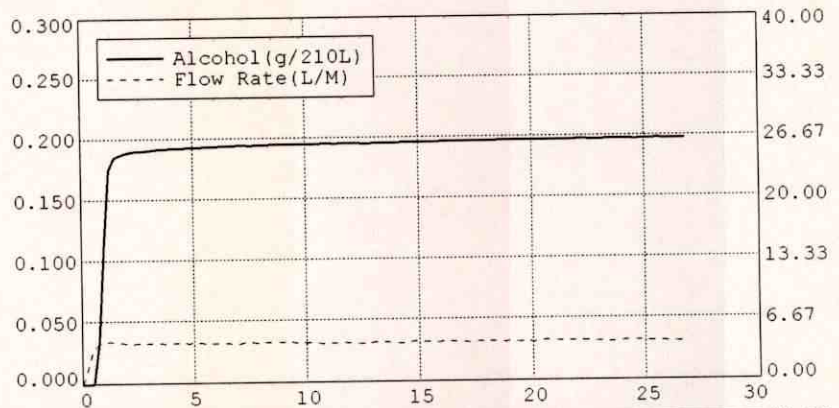
Date: 05/25/2021
 Time: 10:32:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 19200
 EXPIRATION: 08/06/2021

BLANK TEST	0.000	10:33
INTERNAL STANDARD	VERIFIED	10:34
EXTERNAL STANDARD	0.198	10:34
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.198	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.197	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.197	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.197	10:39
BLANK TEST	0.000	10:40

Average = 0.1974
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

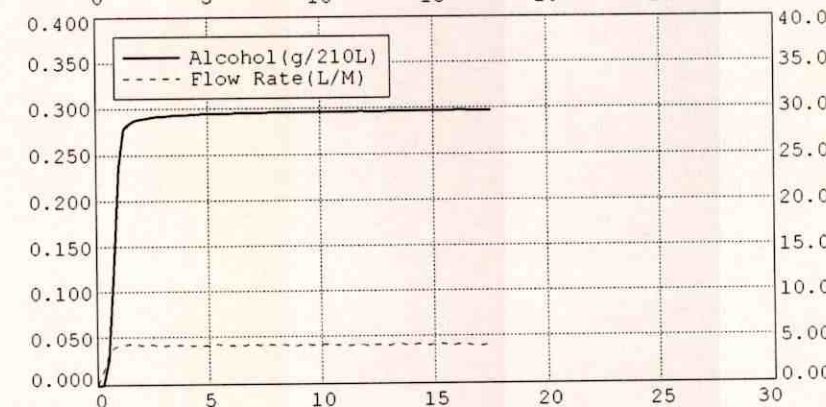
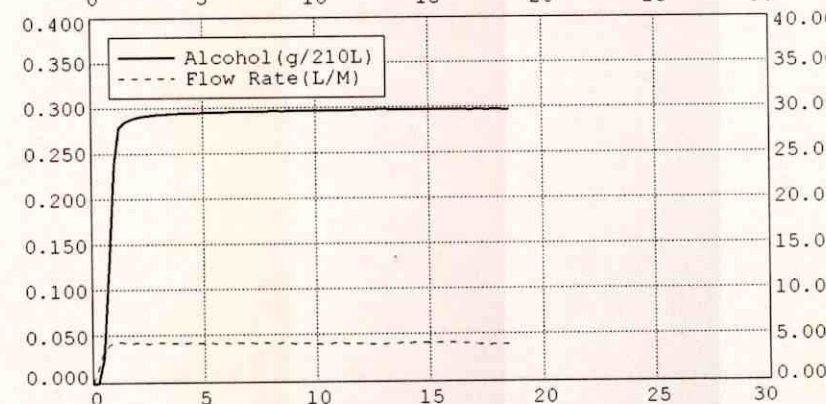
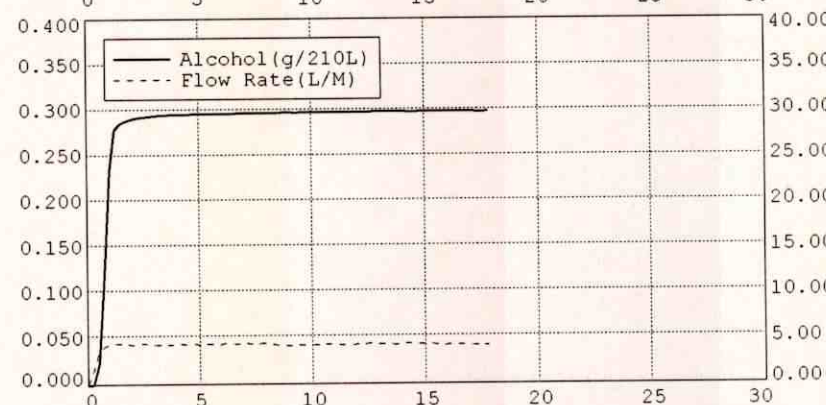
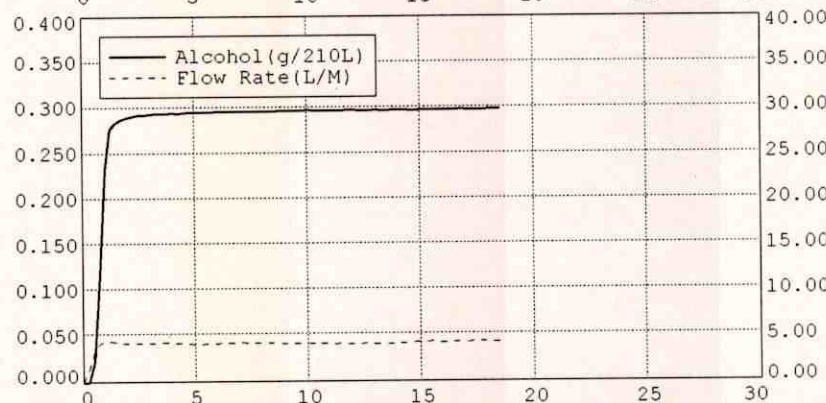
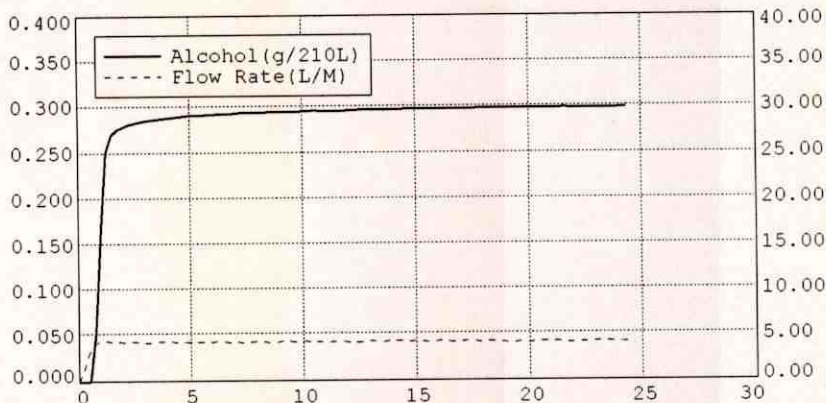
Alaska Department of Public Safety
 DATAMASTER dmt: 100422

Date: 05/25/2021
 Time: 10:53:50

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

BLANK TEST	0.000	10:55
INTERNAL STANDARD	VERIFIED	10:55
EXTERNAL STANDARD	0.298	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.297	10:57
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.297	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.297	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.297	11:01
BLANK TEST	0.000	11:01

Average = 0.2972
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 11:06:44

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

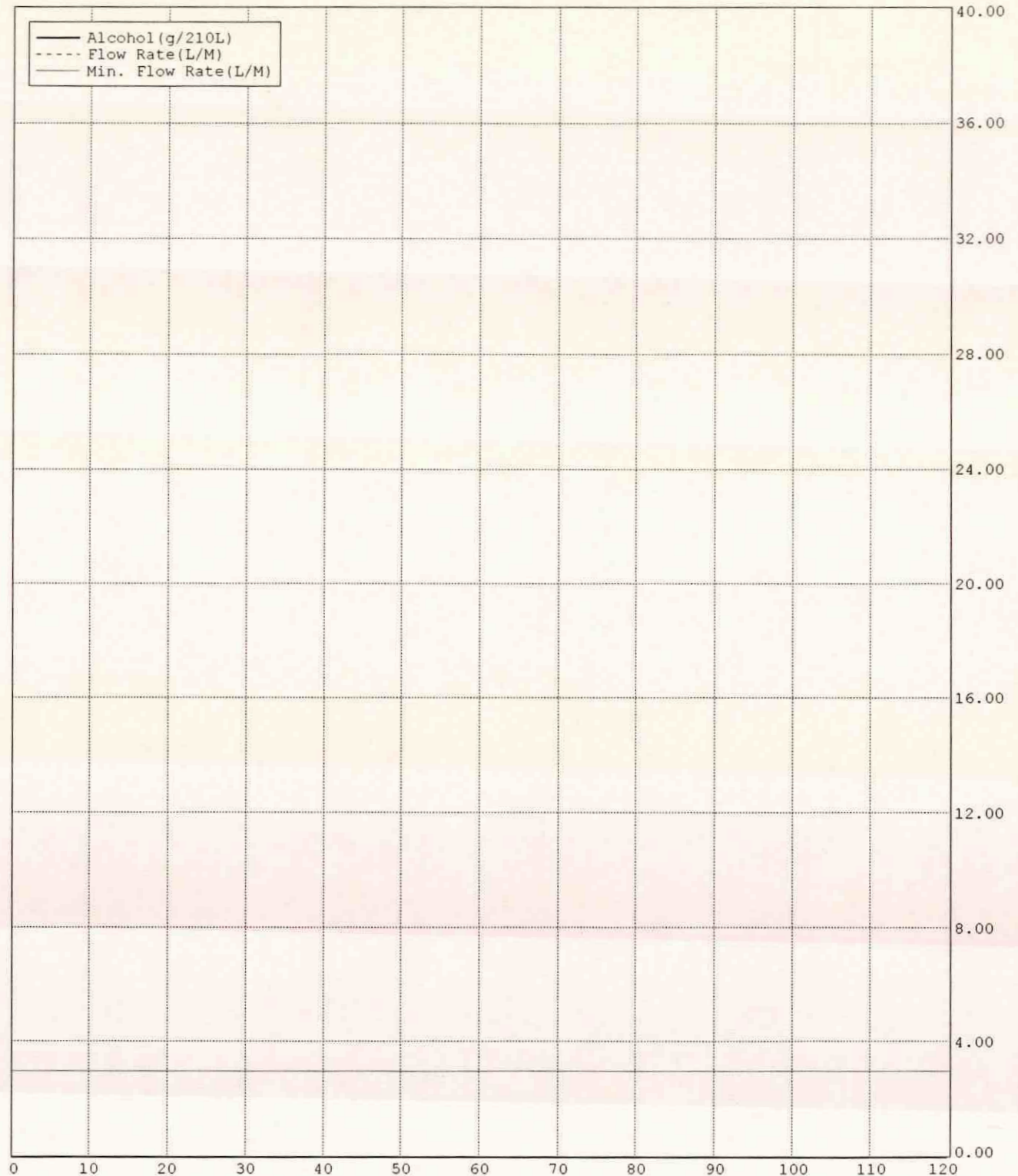
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.76: 0.080

DIAGNOSTIC CHECK	PASSED	11:08
BLANK TEST	0.000	11:08
INTERNAL STANDARD	VERIFIED	11:08
EXTERNAL STANDARD	0.079	11:08
BLANK TEST	0.000	11:09
SUBJECT SAMPLE	INCOMPLETE	11:11

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

DJW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 12:29:05

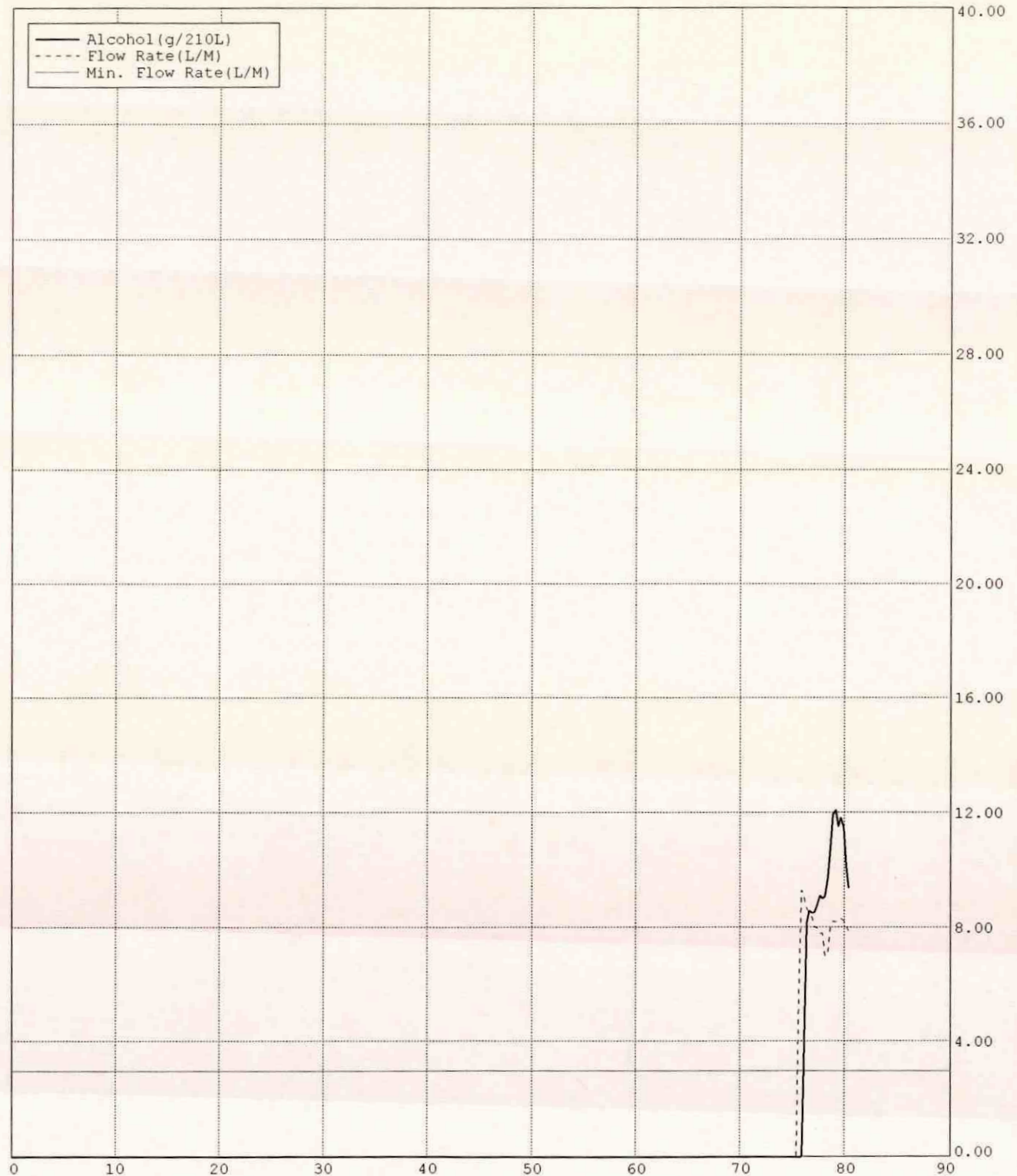
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.75: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:30
BLANK TEST	0.000	12:30
INTERNAL STANDARD	VERIFIED	12:30
EXTERNAL STANDARD	0.078	12:30
BLANK TEST	0.000	12:31
SUBJECT SAMPLE	INVALID	12:33



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 12:47:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.76: 0.080

DIAGNOSTIC CHECK	PASSED	12:48
BLANK TEST	0.000	12:48
INTERNAL STANDARD	VERIFIED	12:49
Xq = 0.125 (1.00%)		
EXTERNAL STANDARD	0.079	12:49
X[1] = 0.0791 (-0.0013) (0.0027)		
BLANK TEST	0.000	12:50
SUBJECT SAMPLE	XXX	12:52
X[1] = 0.1098 (-0.0192) (0.0014)		

Interference Detected

Filter 2 Avg: -0.0015

Filter 3 Avg: 0.0024

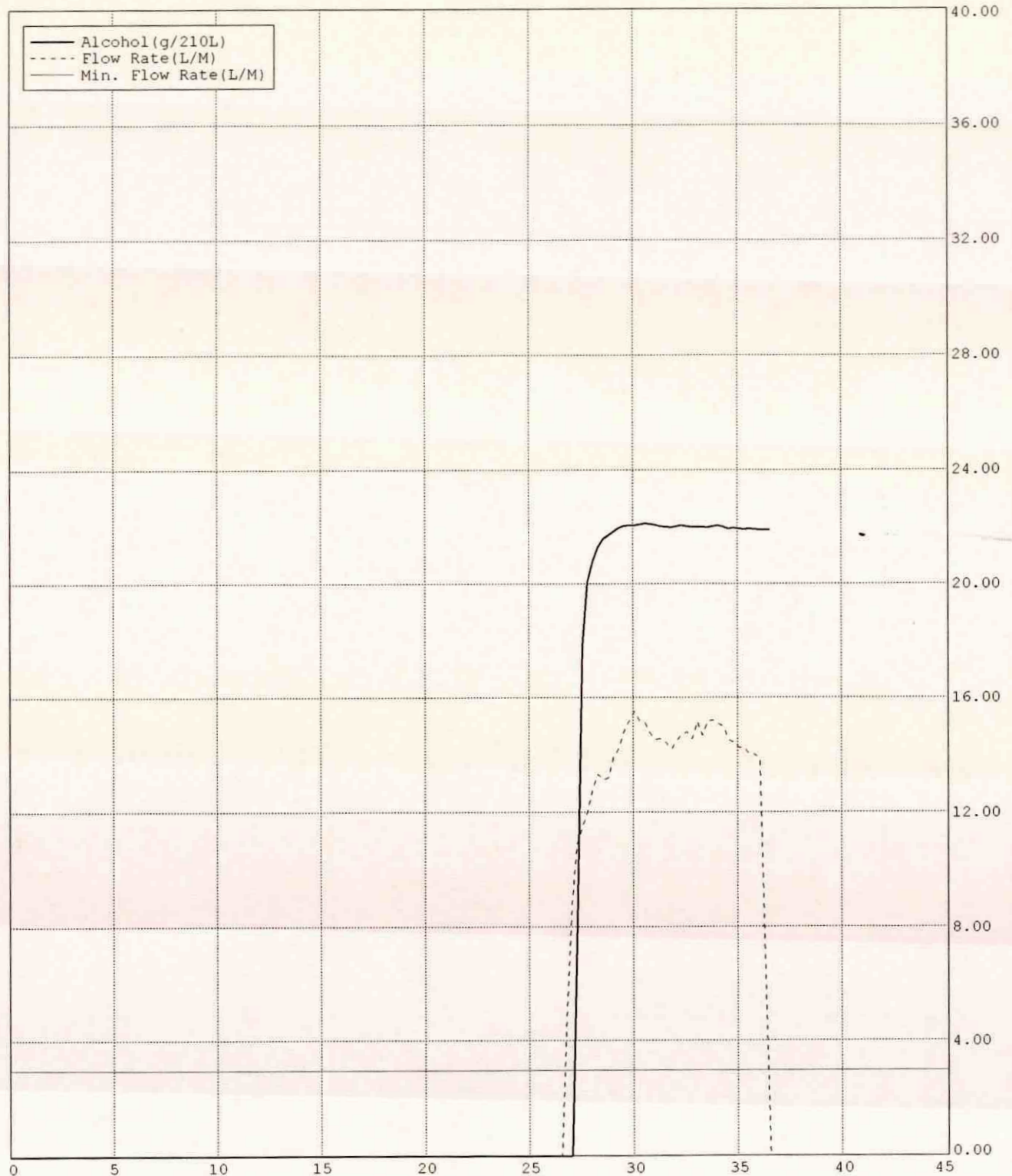
CLB 5/25/2021

DW

AG018102

Exp. 06/29/2022

CKB 6/7/2021 *DW*



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 13:10:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

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

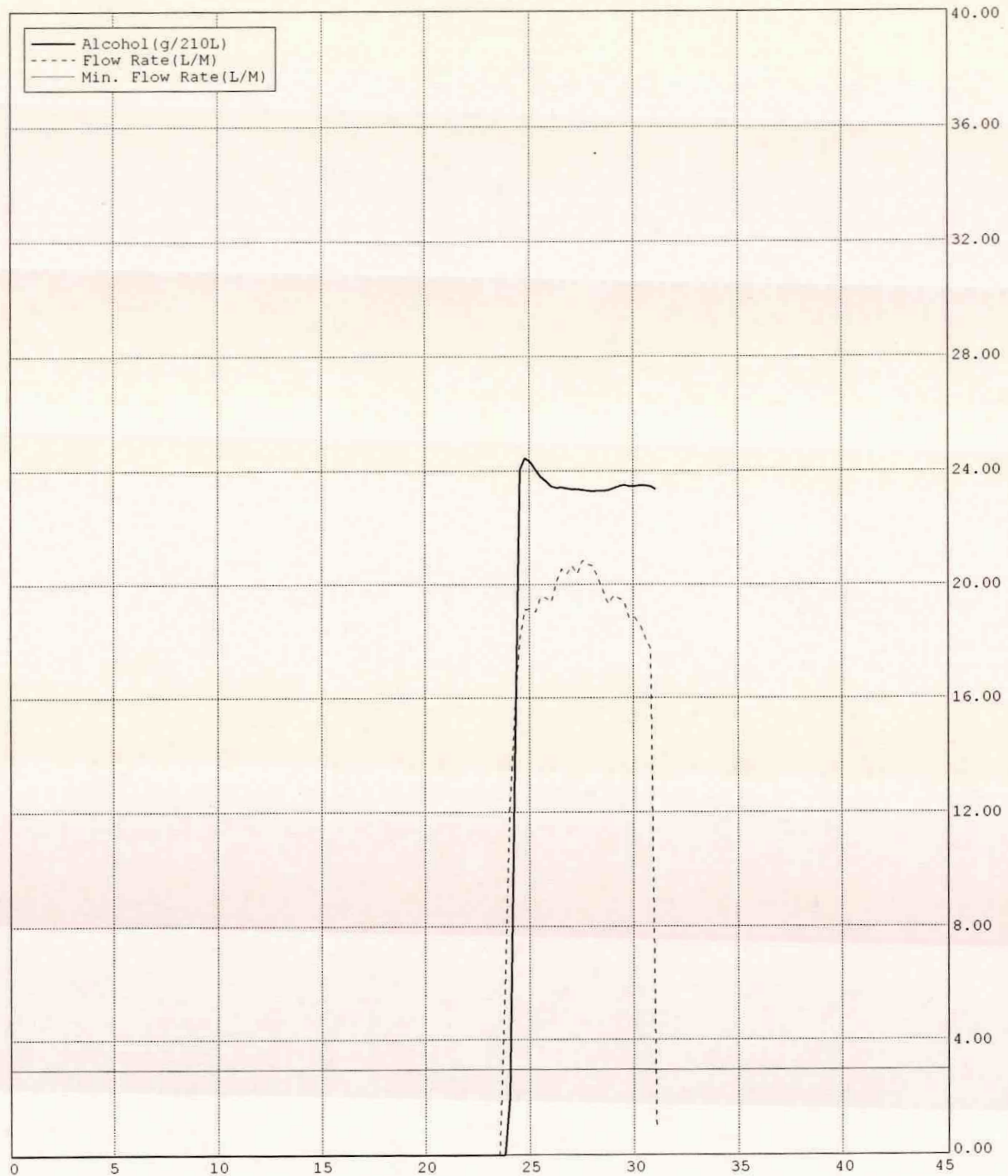
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.76: 0.080

DIAGNOSTIC CHECK	PASSED	13:11
BLANK TEST	0.000	13:11
INTERNAL STANDARD	VERIFIED	13:11
Xq = 0.125 (1.00%)		
EXTERNAL STANDARD	0.079	13:11
X[1] = 0.0788 (-0.0014) (0.0019)		
BLANK TEST	0.000	13:12
SUBJECT SAMPLE	XXX	13:14
X[1] = 0.1170 (-0.0315) (0.0027)		

Interference Detected

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

CBW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 13:02:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

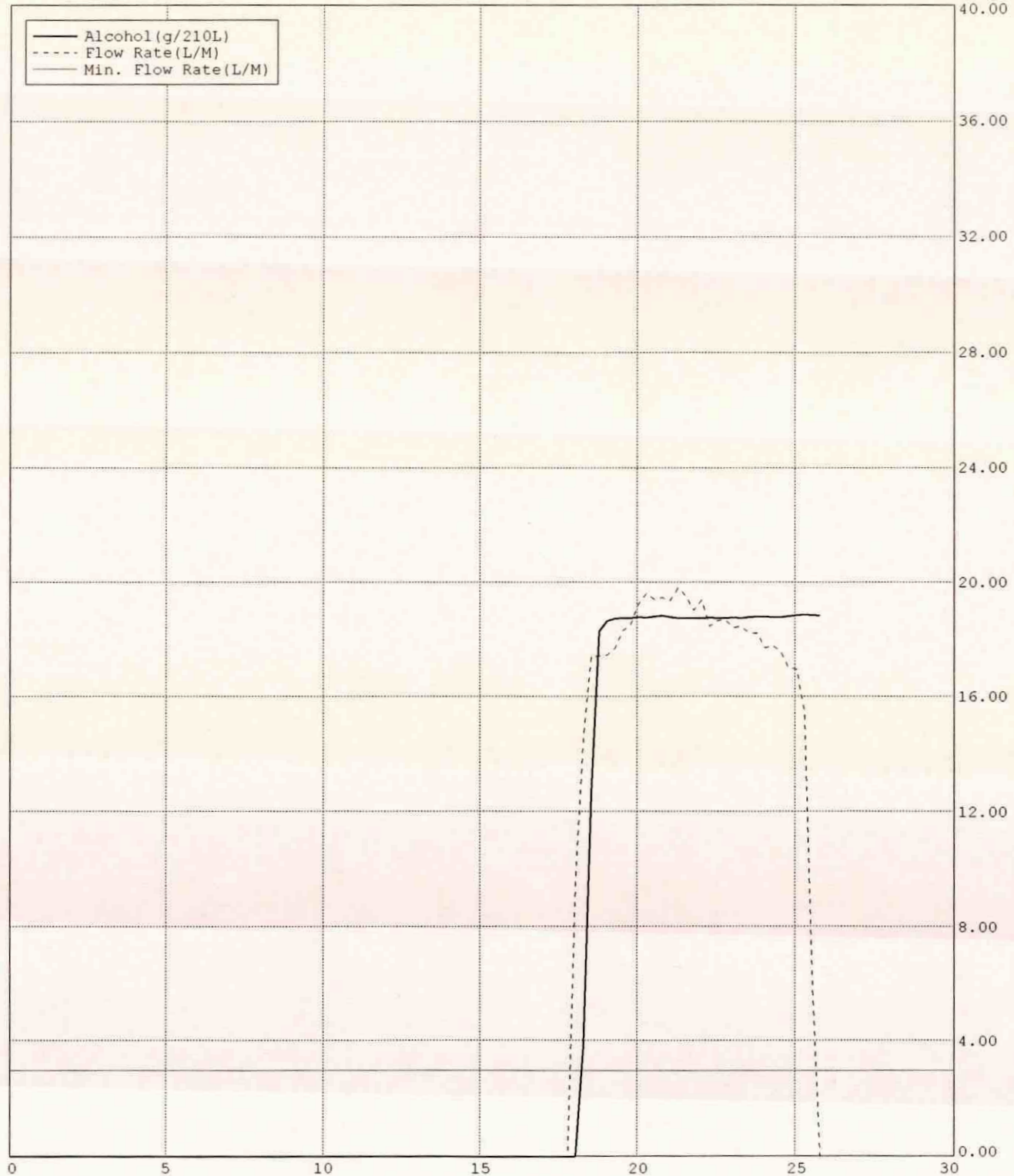
OPERATOR NAME: *Daw*
CARLIE BAILEY
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.76: 0.080

DIAGNOSTIC CHECK	PASSED	13:04
BLANK TEST	0.000	13:04
INTERNAL STANDARD	VERIFIED	13:04
Xq = 0.125 (0.72%)		
EXTERNAL STANDARD	0.078	13:04
X[1] = 0.0784 (-0.0016) (0.0028)		
BLANK TEST	0.000	13:05
SUBJECT SAMPLE (Vol=2.27L)	0.095	13:06
X[1] = 0.0950 (-0.0003) (0.0016)		
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.078	13:07
X[1] = 0.0782 (-0.0015) (0.0022)		
BLANK TEST	0.000	13:08

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

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 12:21:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

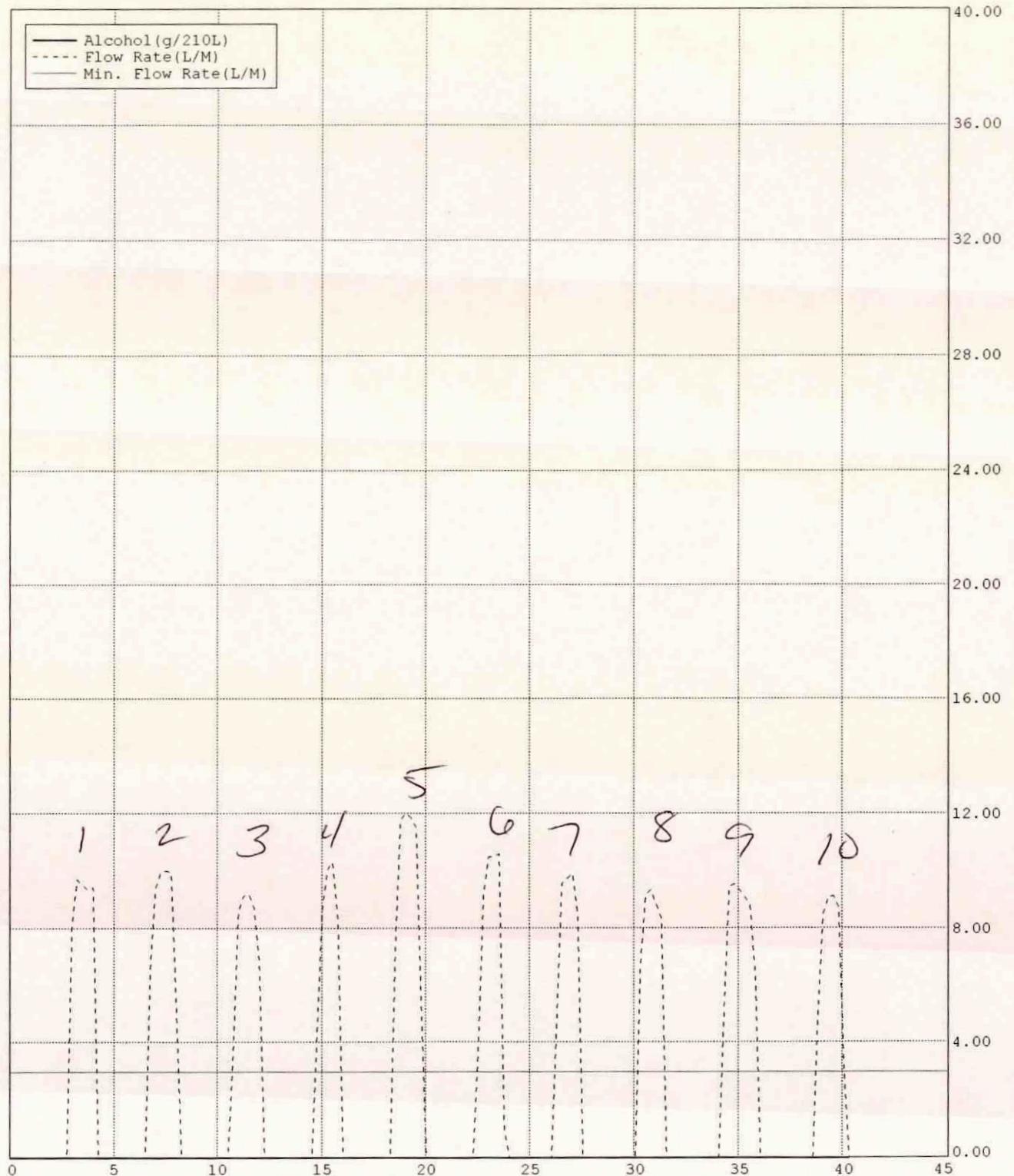
DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080

DIAGNOSTIC CHECK	PASSED	12:23
BLANK TEST	0.000	12:23
INTERNAL STANDARD	VERIFIED	12:23
EXTERNAL STANDARD	0.079	12:24
BLANK TEST	0.000	12:25
SUBJECT SAMPLE	XXX	12:25

Maximum Attempts Exceeded

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 12:36:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

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

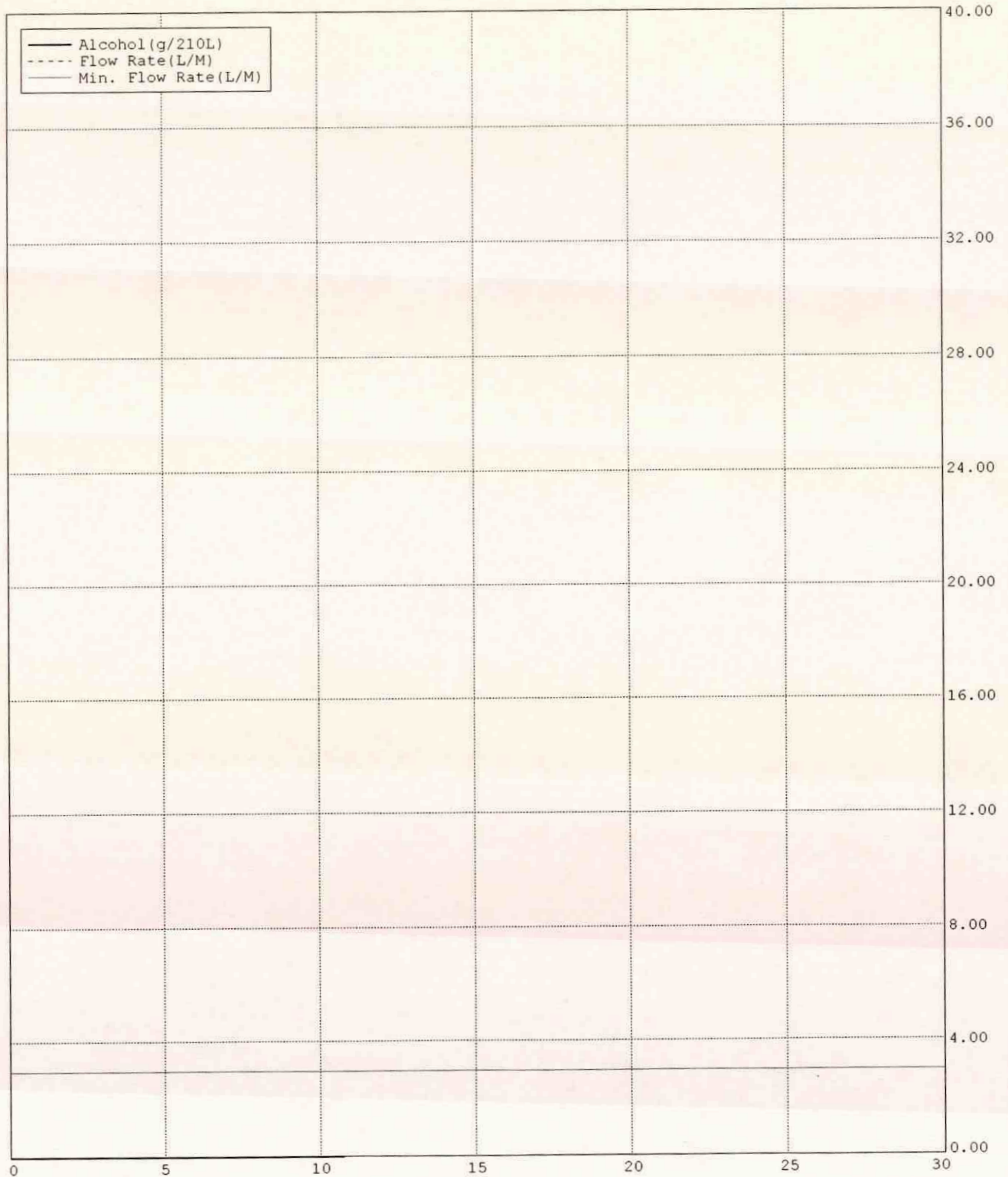
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.76: 0.080

DIAGNOSTIC CHECK	PASSED	12:38
BLANK TEST	0.000	12:38
INTERNAL STANDARD	VERIFIED	12:38
EXTERNAL STANDARD	0.079	12:38
BLANK TEST	0.000	12:39

RFI DETECTED

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

DJW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100422

Date: 05/25/2021
Time: 13:42:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *DJW*
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 29.75: 0.080

DIAGNOSTIC CHECK	PASSED	13:43
BLANK TEST	0.000	13:44
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.079	13:44
BLANK TEST	0.000	13:45
SUBJECT SAMPLE (Vol=2.42L)	0.000	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.079	13:47
BLANK TEST	0.000	13:48

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

DJW

CKB DJW

