

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

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

Version: DMCEF 2020 R0
Status: Active

Instrument S/N 100412 Analyst Carrie 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 A6928203 Exp 10/9/2021
- ii. 0.040g/210L Mnf Airgas Lot A6915607 Exp 6/5/2021
- iii. 0.080g/210L Mnf Airgas Lot A6018102 Exp 6/29/2022
- iv. 0.100g/210L Mnf Airgas Lot A6108404 Exp 3/25/2023
- v. 0.200g/210L Mnf Buth Lot 19200 Exp 8/6/2021
Simulator S/N DR6267 Date Calibrated 11/17/2020
- vi. 0.300g/210L Mnf Buth Lot 19330 Exp 11/13/2021
Simulator S/N DR4177 Date Calibrated 11/17/2020

Functional Tests (attached)

Incomplete

Invalid

Interference

- i. Acetone - Mnf Buth Lot 19301 Level 0.100 Exp 10/30/2021
Simulator S/N DR4178 Date Calibrated 11/18/2020
- ii. Isopropanol - Mnf Buth Lot 19301 Level 0.100 Exp 10/30/2021
Simulator S/N DR4176 Date Calibrated 11/18/2020
- iii. Negative Control - Mnf Buth Lot 19301 Level 0.100 Exp 10/30/2021
Simulator S/N DR4163 Date Calibrated 10/30/2021 OMB 6/18/2021

Exceeded Attempts

RFI 11/17/2020 DBW

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: 100412

Date: 05/25/2021
Time: 09:08:27

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.70 V PASSED
(1.02 V - 2.38 V)
Cooler Voltage = 1.71 V PASSED
(1.03 V - 2.39 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 525 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.824 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 = 0.087 0.40% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 9:15 AM

Temperatures (°C)

Sample Cell: 48.6°C
Breath Tube: 45.3°C

Current Barometer 29.8 in
Volume (Ltr) 1.55

Settings

Lamp: 1.70 V
Bias: 80 V
Cooler: 1.66 V
Chopper: 524 Hz

Voltages (V)

Flow: 1.05 V
Detector: -0.060 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/19/2021
Time: 11:49:16

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

Ca	=	0.1000		
CAL	=	0.957572	0.800	<= CAL < 1.200
b1	=	0.0010	0.0000	<= b1 < 0.0040
b2	=	0.0054	0.0010	<= b2 < 0.0100
b3	=	0.0004	0.0000	<= b3 < 0.0040
Xq	=	0.0862	0.0500	<= Xq < 0.2000
a21	=	1.162237	1.050	<= a21 < 1.300
a31	=	0.556113	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 09:29:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

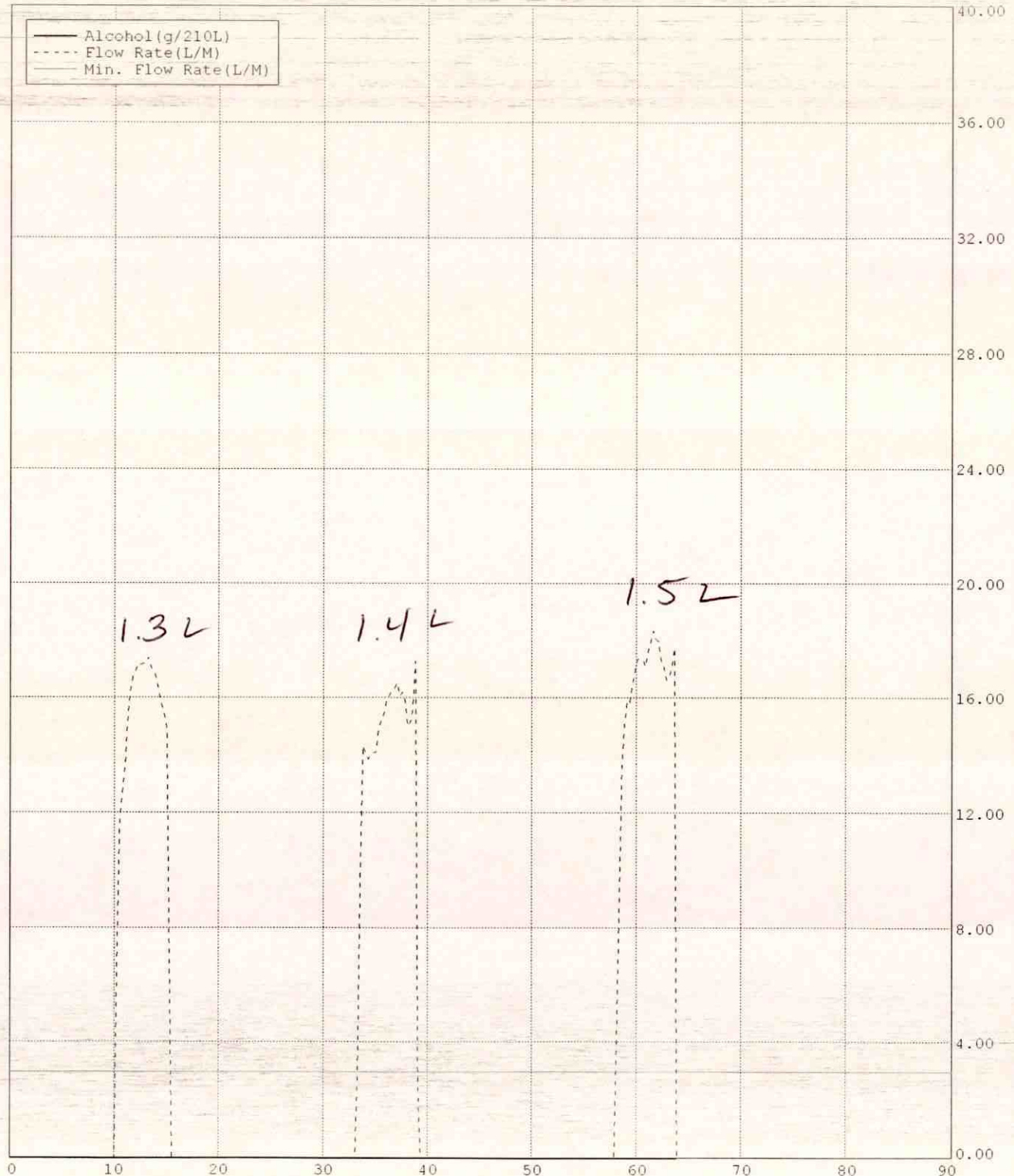
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.80: 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=1.54L)	0.000	09:32
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.078	09:33
BLANK TEST	0.000	09:34

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

CKB DJW



LINEARITY CHECK

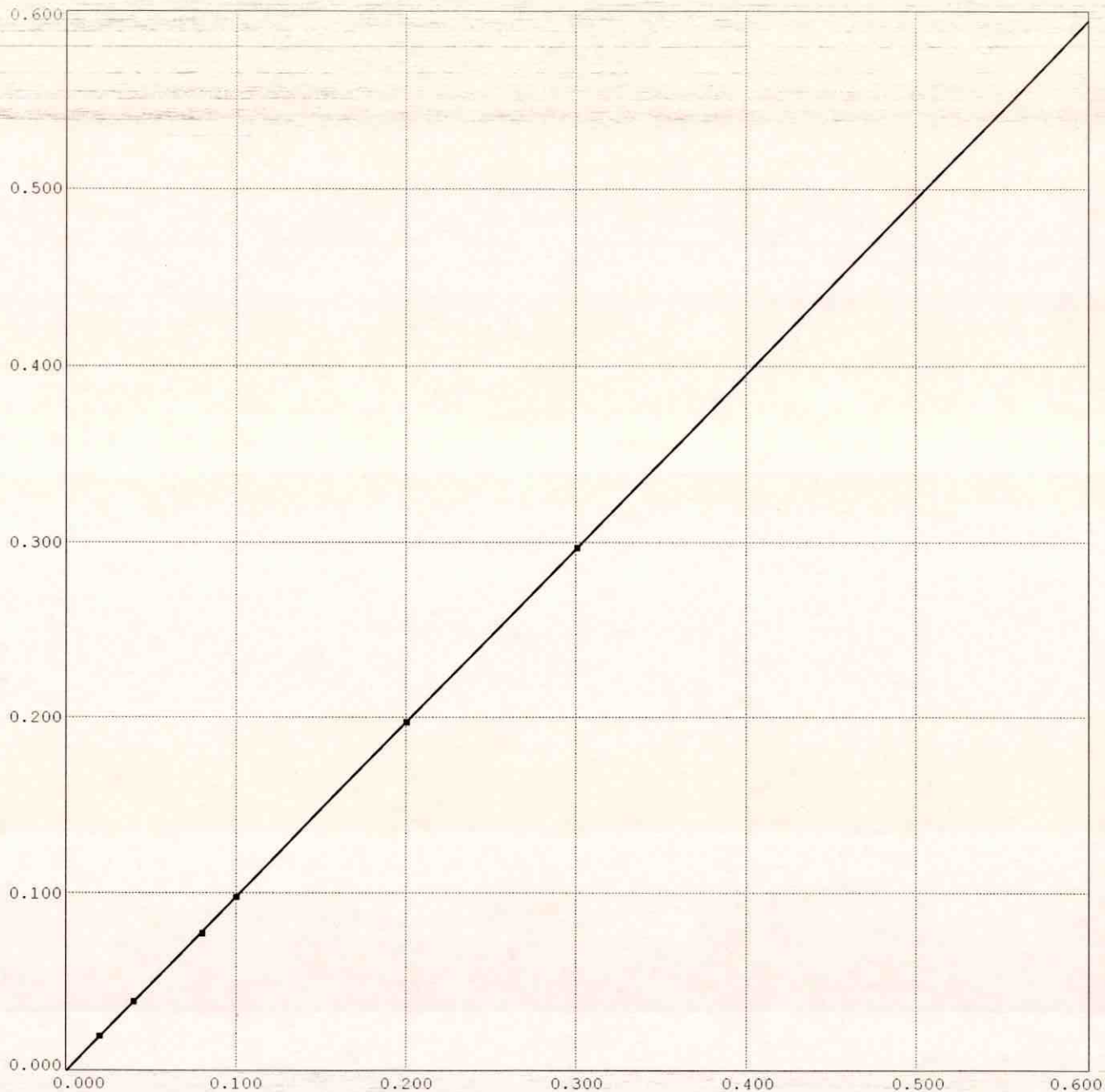
Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 09:40:31

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0394	0.0005
0.080	0.0782	0.0004
0.100	0.0986	0.0005
0.200	0.1980	0.0007
0.300	0.2974	0.0005

SLOPE = 0.992089
R² = 0.999983



COXB Jan

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100412

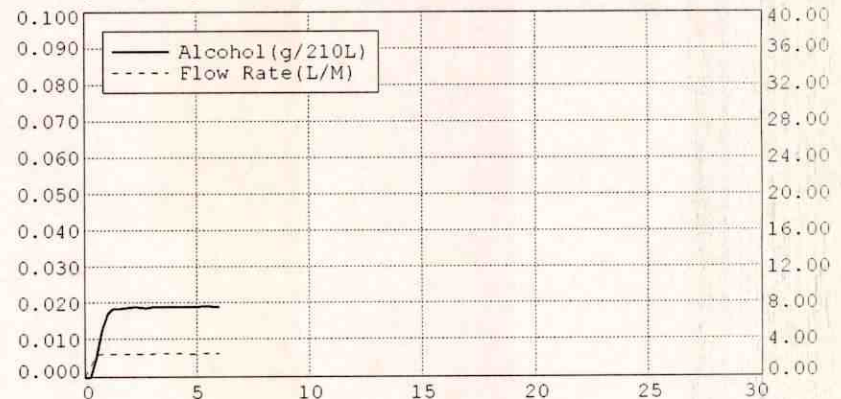
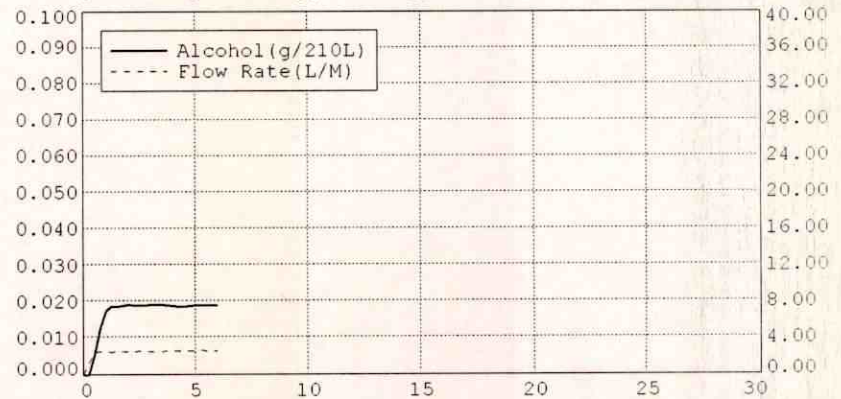
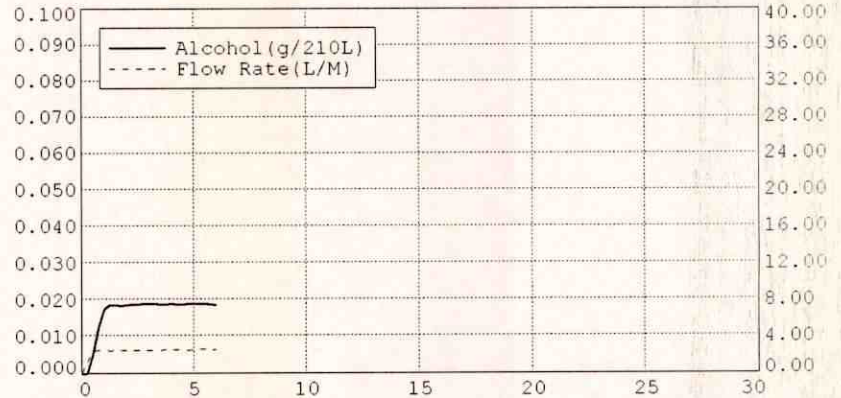
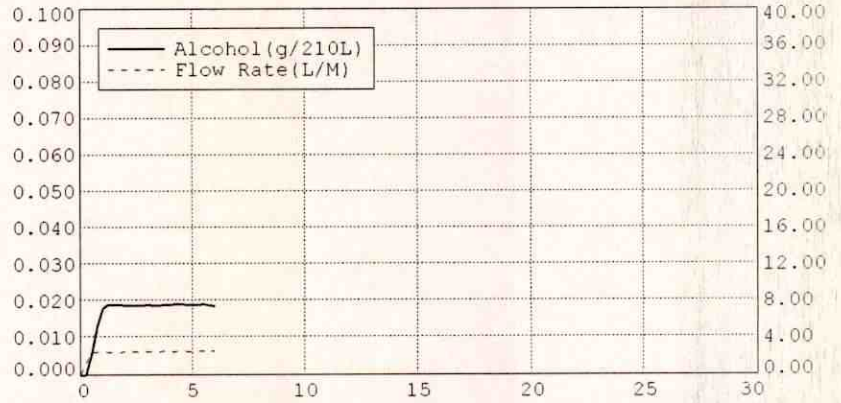
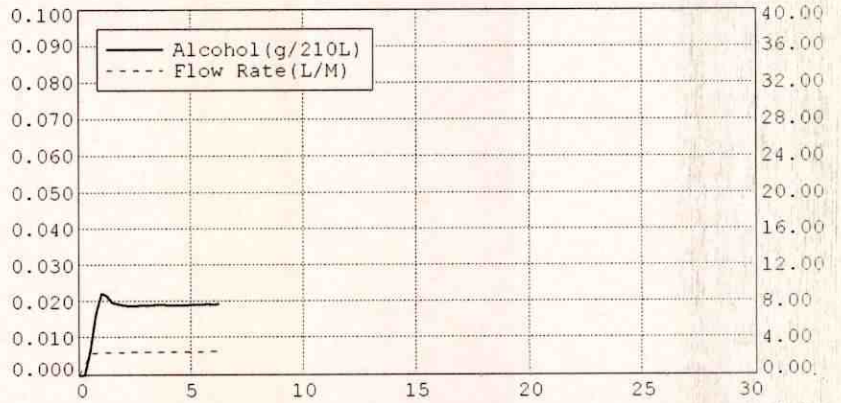
Date: 05/25/2021
Time: 09:40:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.80: 0.020
LOT #: AG928203
EXPIRATION: 10/09/2021
TANK PRESSURE: 461 psi

BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
EXTERNAL STANDARD	0.020	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.020	09:43
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.020	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

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100412

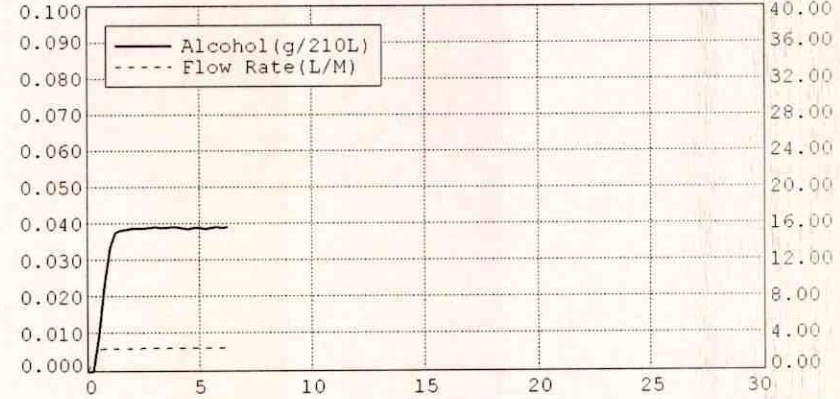
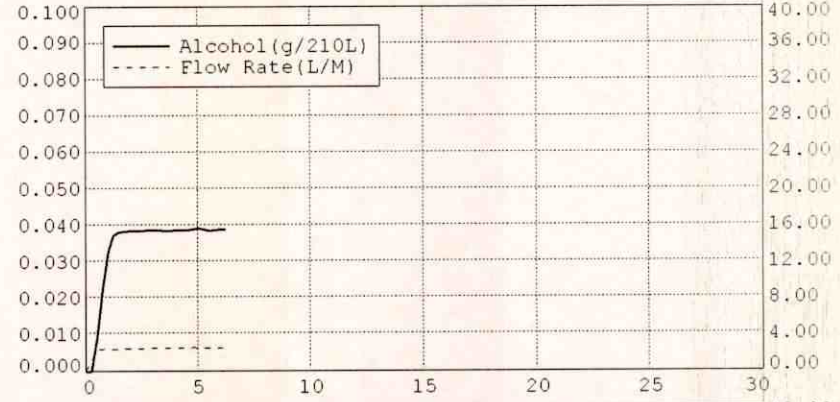
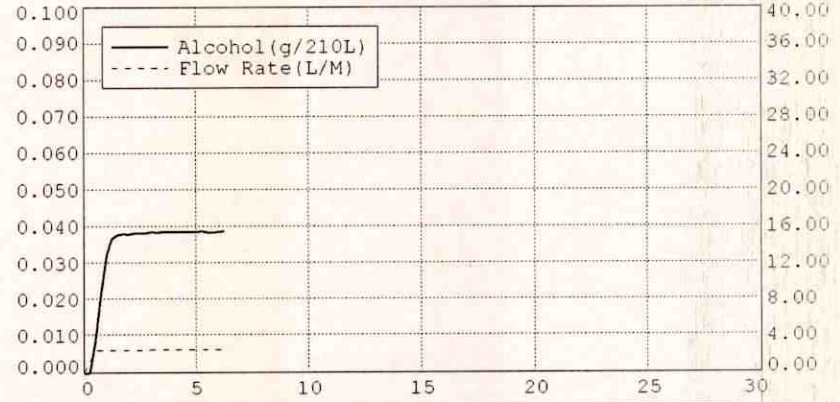
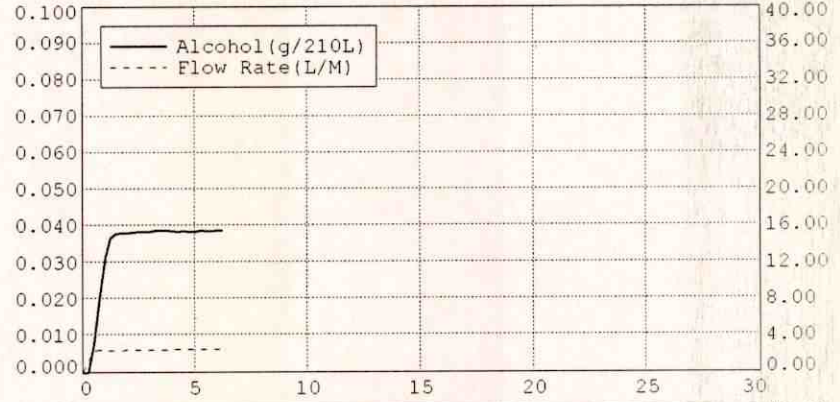
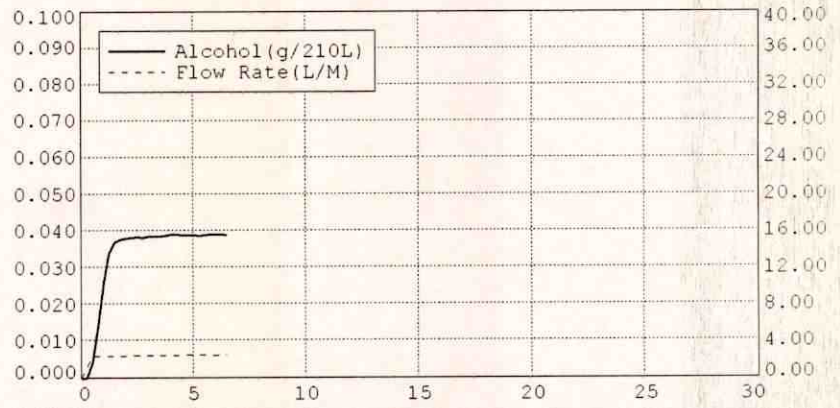
Date: 05/25/2021
 Time: 09:48:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.81: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 269 psi

BLANK TEST	0.000	09:49
INTERNAL STANDARD	VERIFIED	09:50
EXTERNAL STANDARD	0.040	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.039	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.039	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.039	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.040	09:54
BLANK TEST	0.000	09:55

Average = 0.0394
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100412

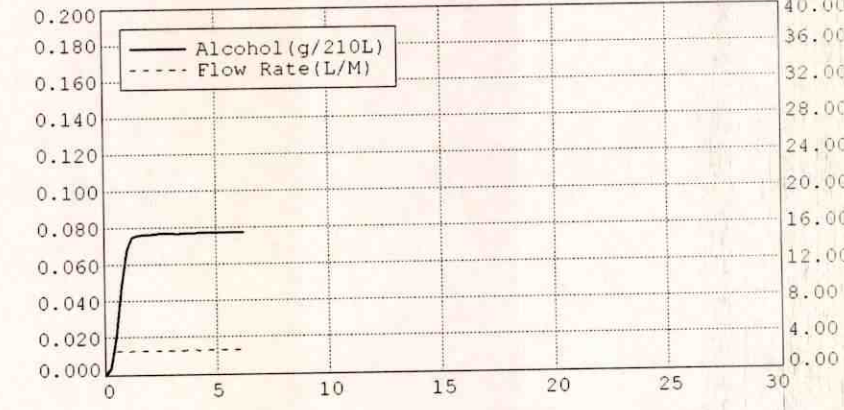
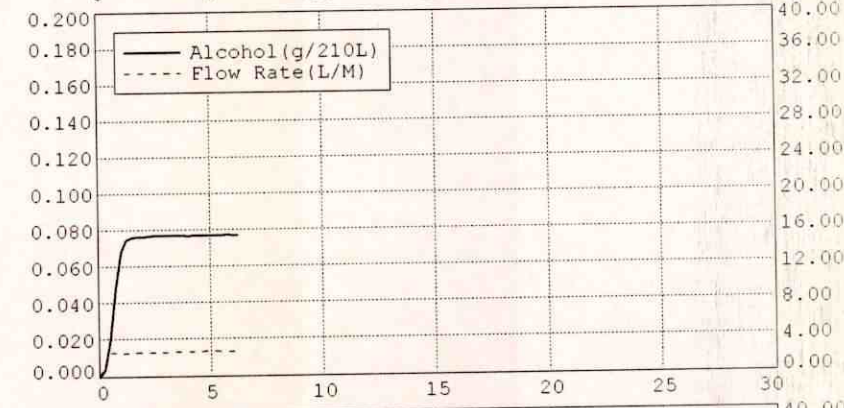
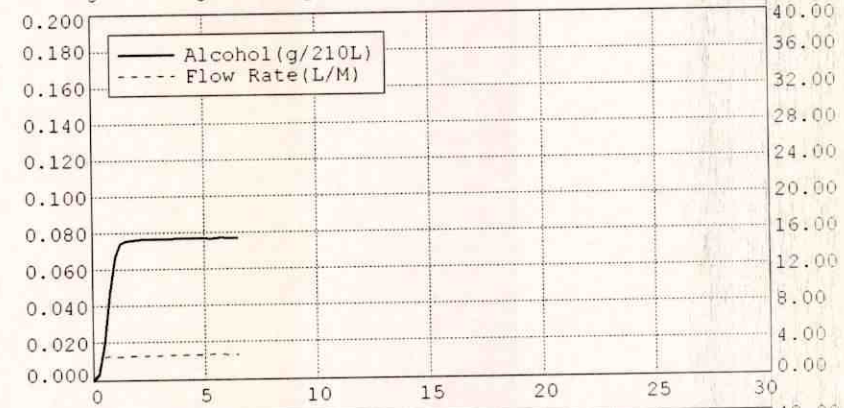
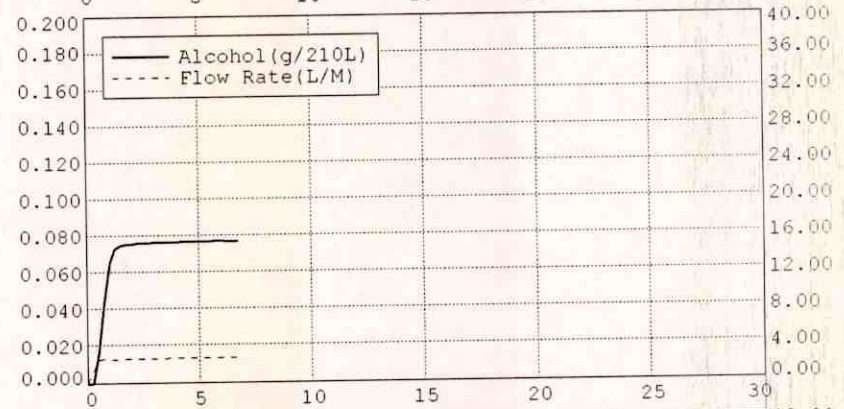
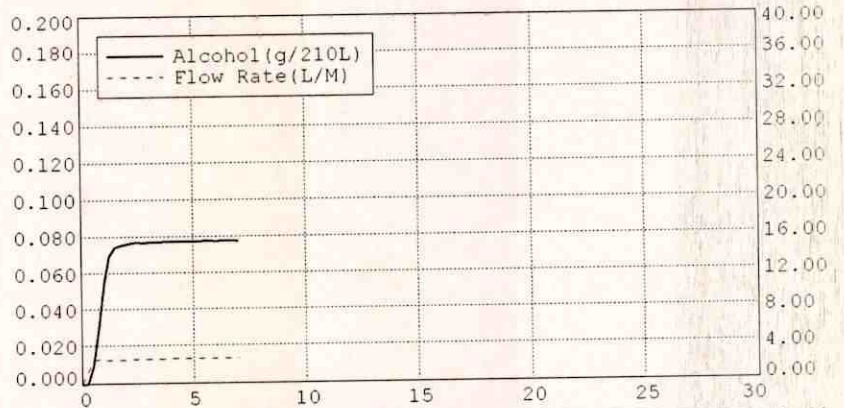
Date: 05/25/2021
 Time: 09:57:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.80: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 849 psi

BLANK TEST	0.000	09:58
INTERNAL STANDARD	VERIFIED	09:58
EXTERNAL STANDARD	0.079	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.078	10:00
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.078	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.078	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.078	10:03
BLANK TEST	0.000	10:04

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100412

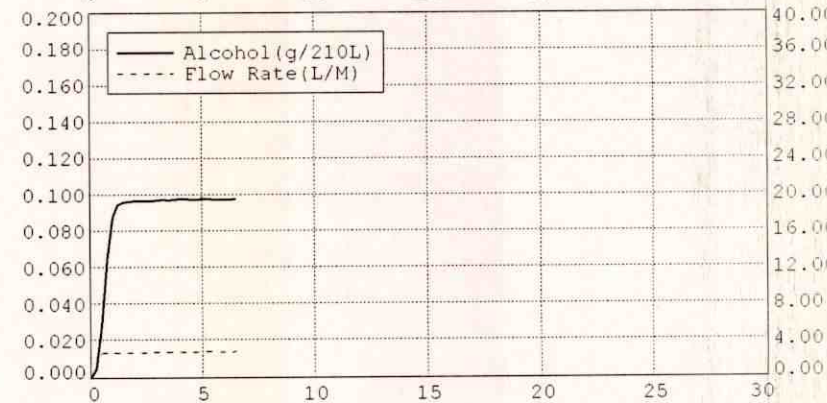
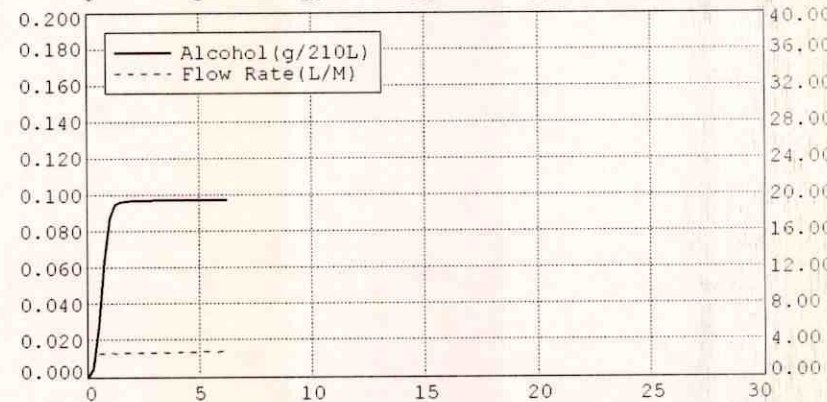
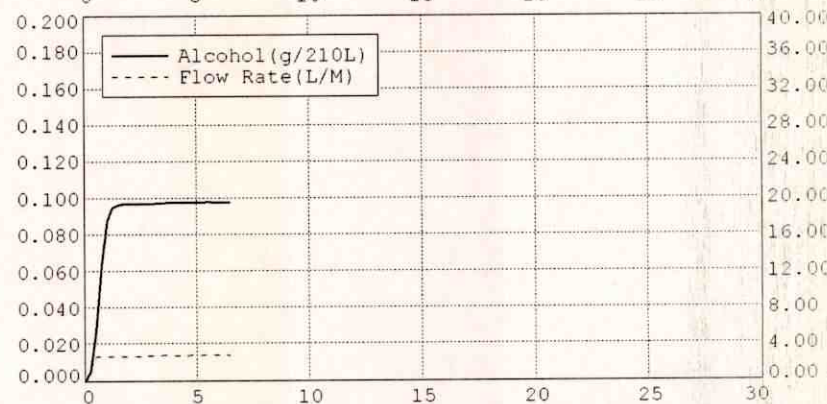
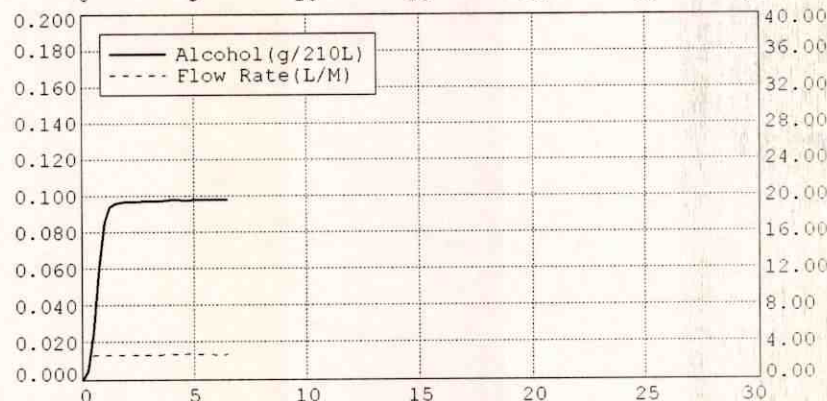
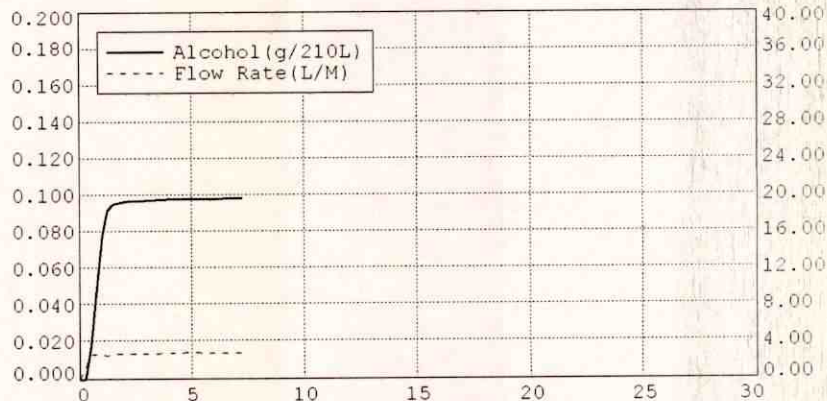
Date: 05/25/2021
 Time: 10:05:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.80: 0.100
 LOT #: AG108404
 EXPIRATION: 03/25/2023
 TANK PRESSURE: 1146 psi

BLANK TEST	0.000	10:06
INTERNAL STANDARD	VERIFIED	10:06
EXTERNAL STANDARD	0.099	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.099	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.099	10:09
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.098	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.098	10:11
BLANK TEST	0.000	10:12

Average = 0.0986
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100412

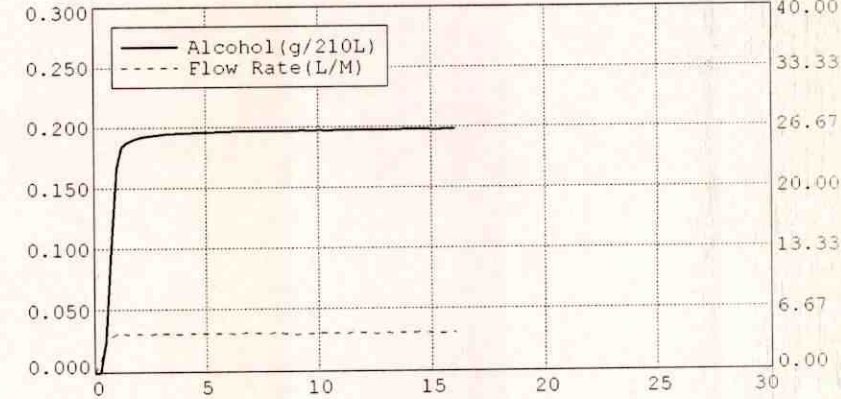
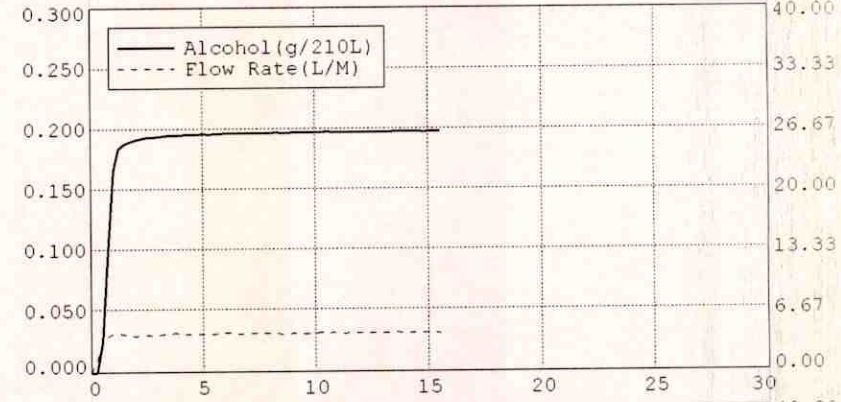
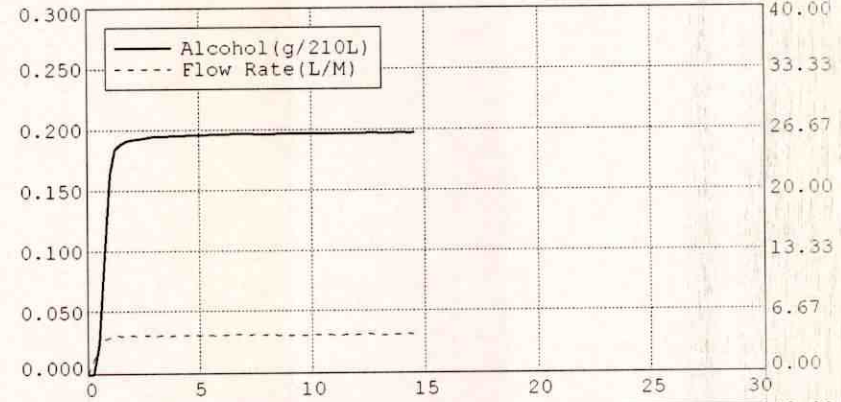
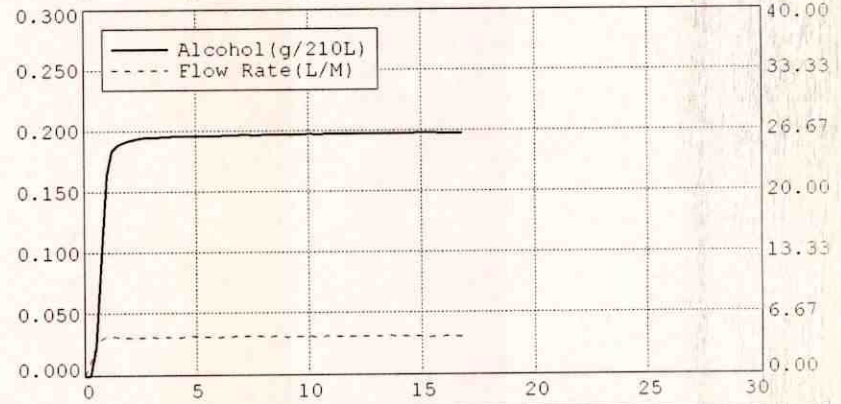
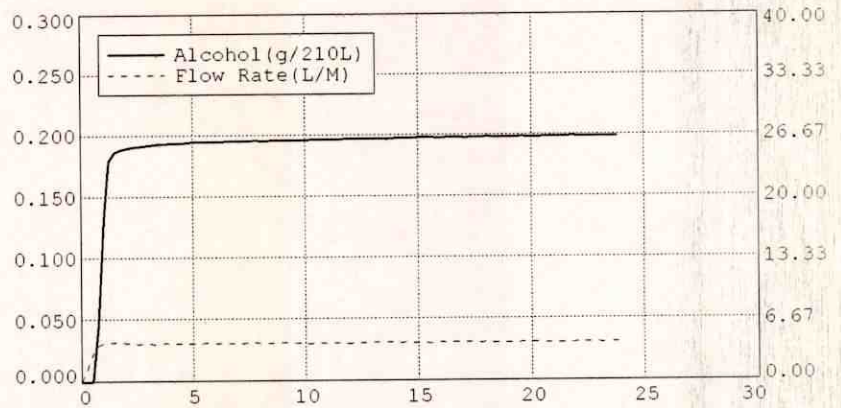
Date: 05/25/2021
 Time: 10:17:38

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:18
INTERNAL STANDARD	VERIFIED	10:18
EXTERNAL STANDARD	0.199	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.198	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.198	10:22
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.197	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.198	10:24
BLANK TEST	0.000	10:25

Average = 0.1980
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

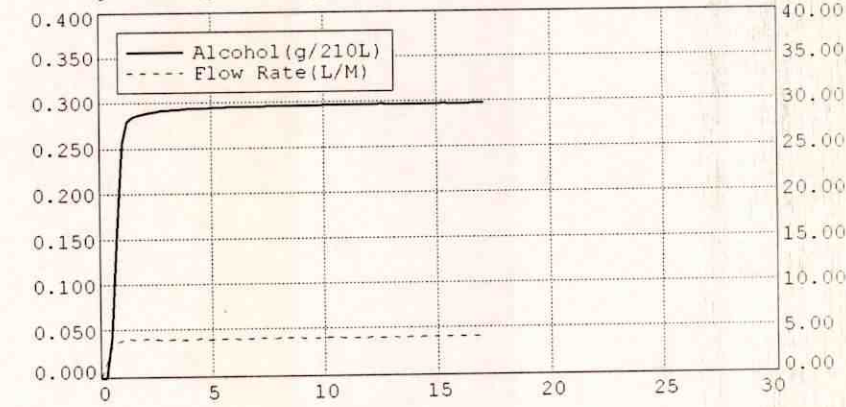
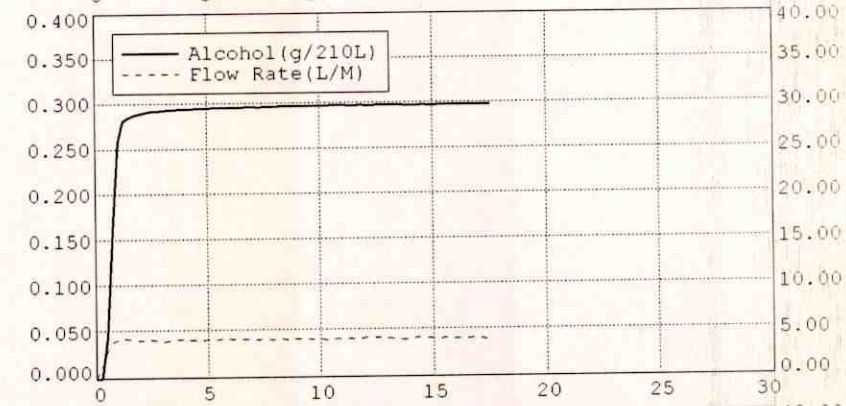
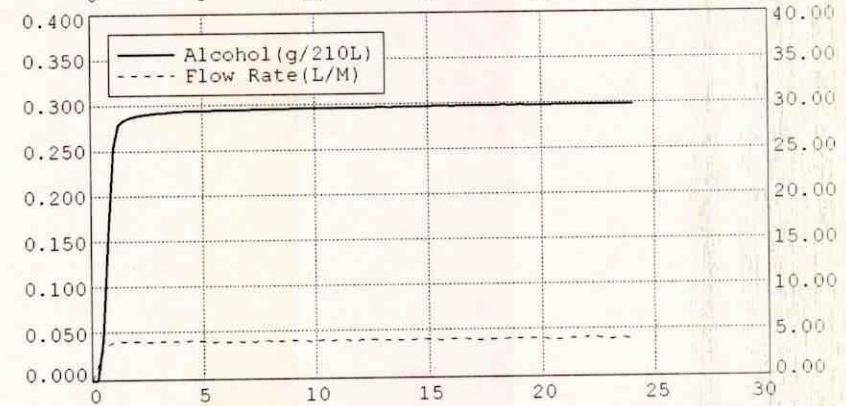
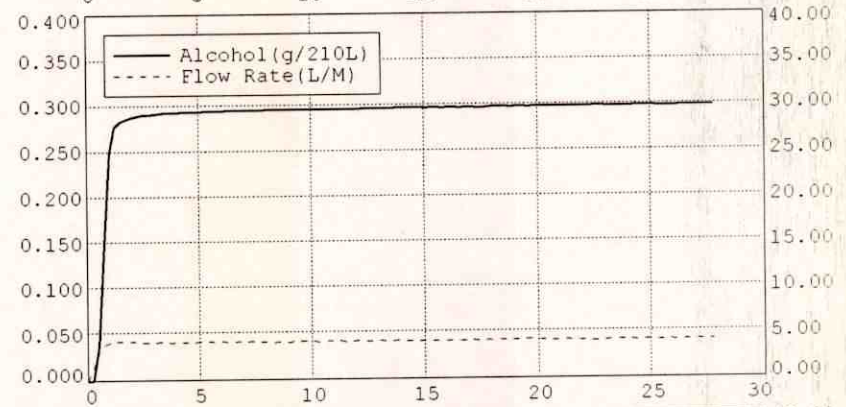
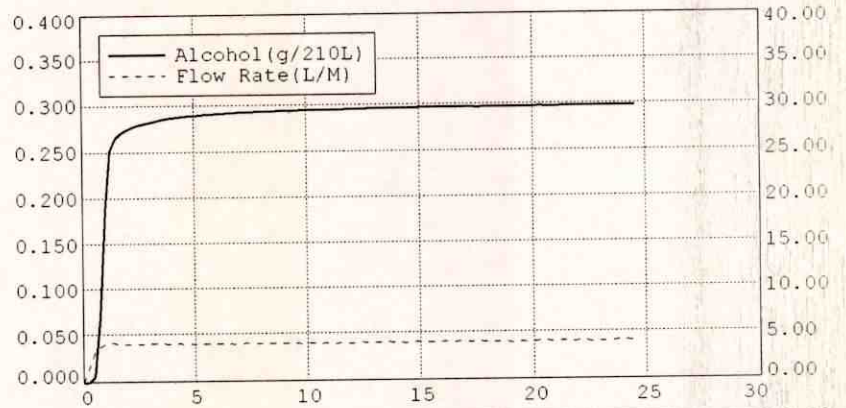
Alaska Department of Public Safety
 DATAMASTER dmt: 100412

Date: 05/25/2021
 Time: 10:34:34

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

BLANK TEST	0.000	10:36
INTERNAL STANDARD	VERIFIED	10:36
EXTERNAL STANDARD	0.297	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.298	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.298	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.297	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.297	10:42
BLANK TEST	0.000	10:43

Average = 0.2974
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 10:54:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

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

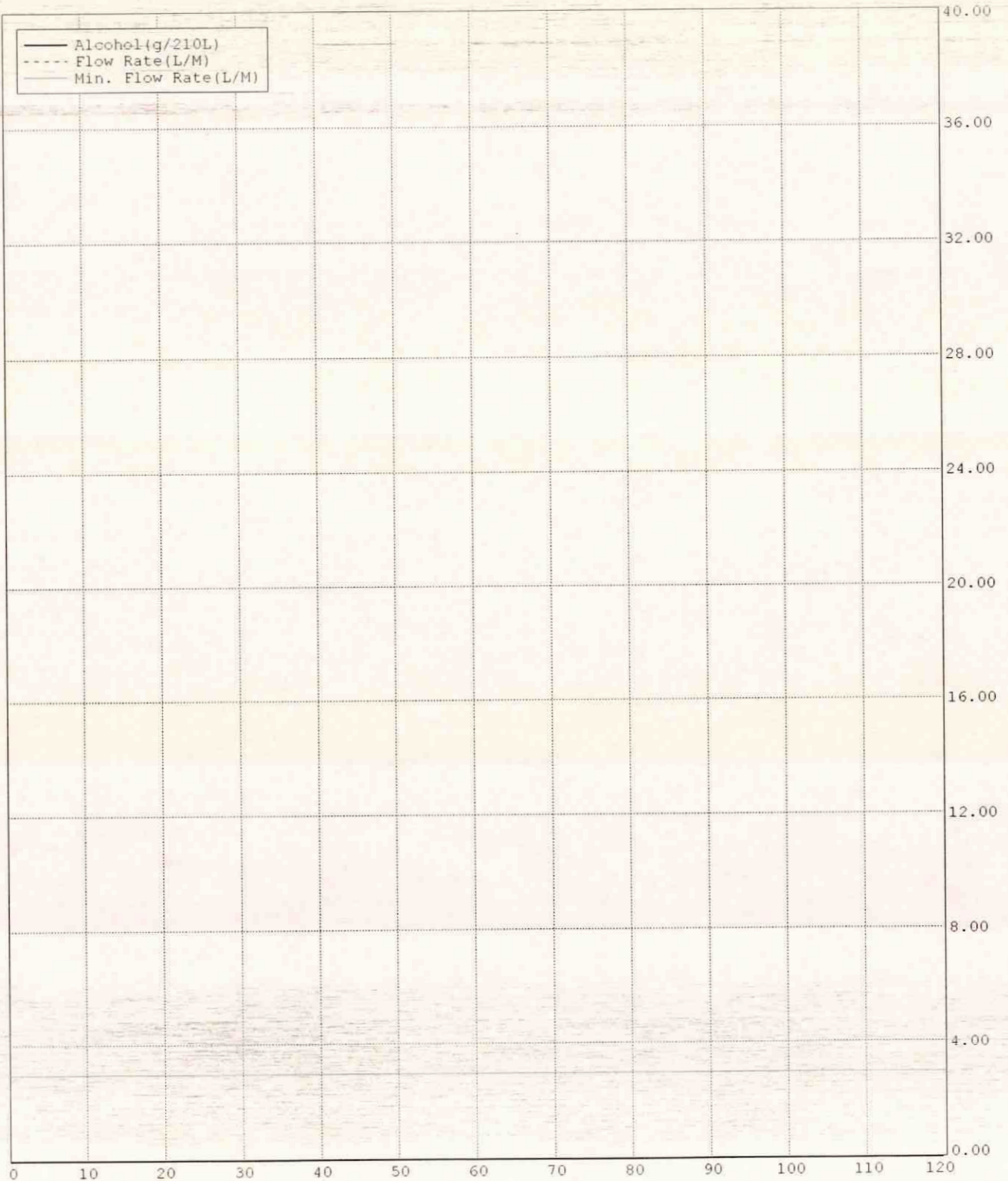
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.79: 0.080

DIAGNOSTIC CHECK	PASSED	10:57
BLANK TEST	0.000	10:57
INTERNAL STANDARD	VERIFIED	10:57
EXTERNAL STANDARD	0.078	10:58
BLANK TEST	0.000	10:59
SUBJECT SAMPLE	INCOMPLETE	11:01

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

DBW

CKB DBW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 12:32:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

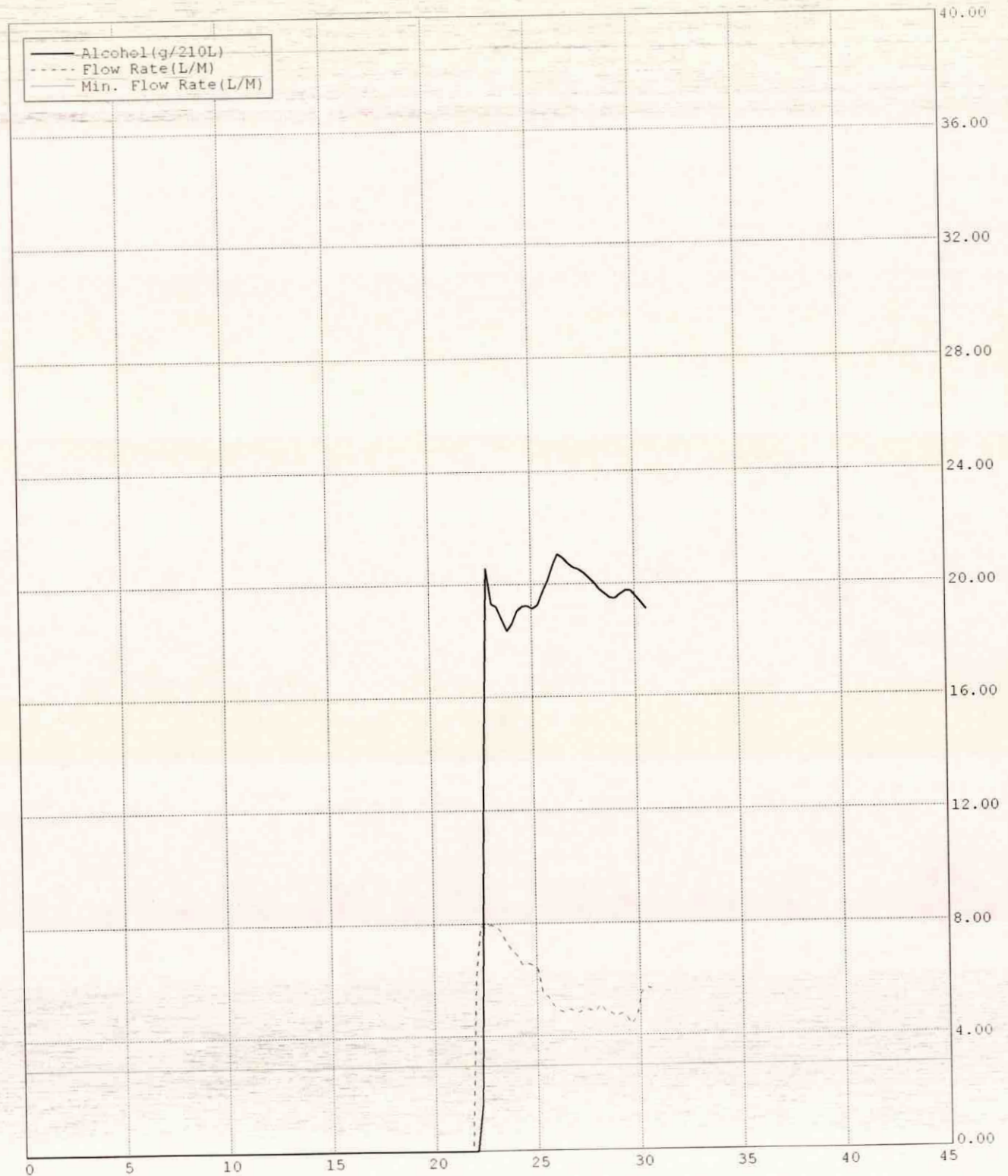
OPERATOR NAME: *DBW*
CARLIE BAILEY
OPERATOR'S #: 10436

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	12:34
BLANK TEST	0.000	12:34
INTERNAL STANDARD	VERIFIED	12:34
EXTERNAL STANDARD	0.078	12:34
BLANK TEST	0.000	12:35
SUBJECT SAMPLE	INVALID	12:36

OKS DBW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 13:04:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

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 29.75: 0.080

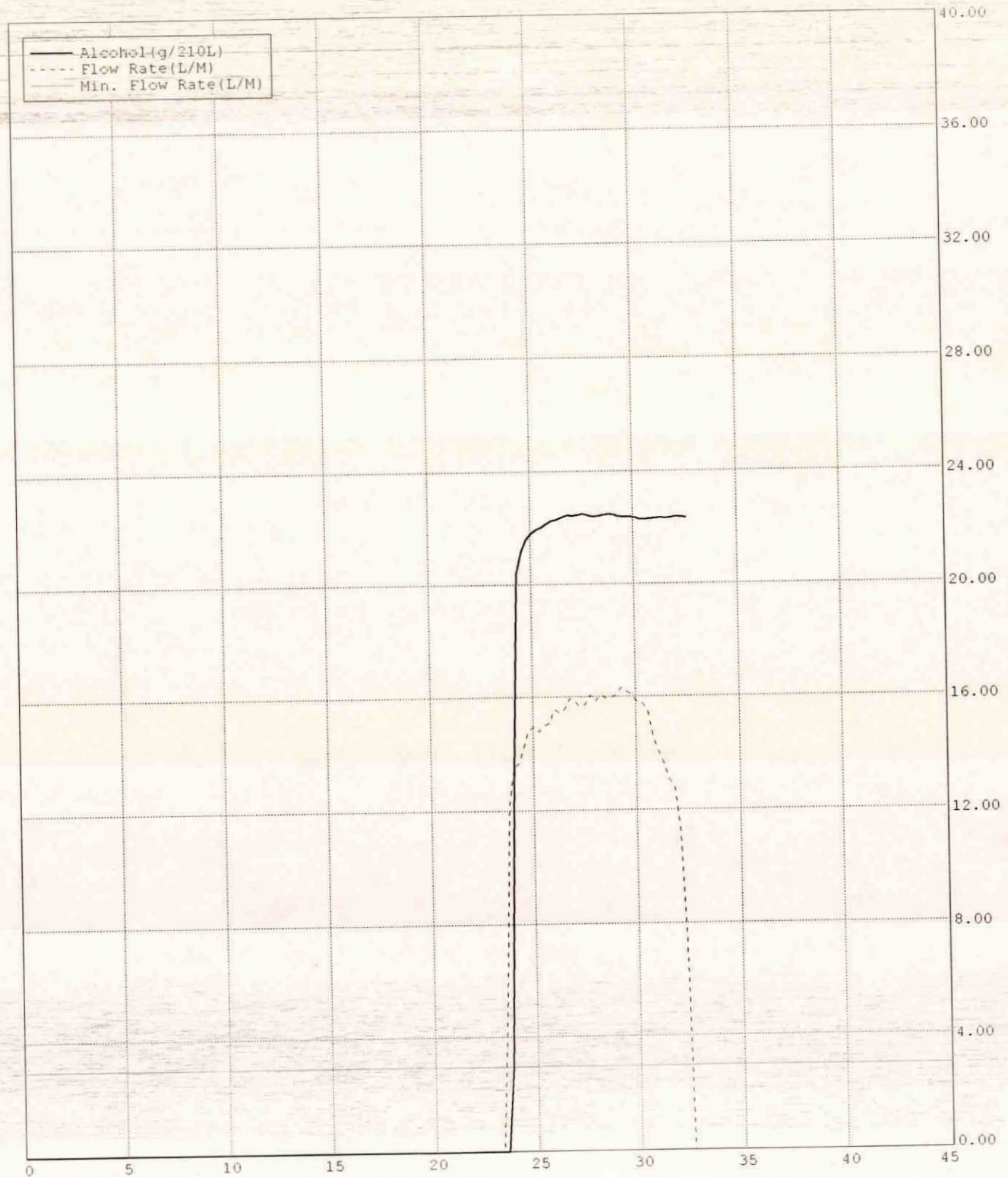
DIAGNOSTIC CHECK	PASSED	13:06
BLANK TEST	0.000	13:06
INTERNAL STANDARD	VERIFIED	13:06
Xq = 0.086 (0.20%)		
EXTERNAL STANDARD	0.078	13:06
X[1] = 0.0779 (-0.0013) (0.0033)		
BLANK TEST	0.000	13:07
SUBJECT SAMPLE	XXX	13:08
X[1] = 0.1127 (-0.0169) (0.0041)		

Interference Detected

Filter 2 Avg: -0.0011

Filter 3 Avg: 0.0028
DW

CKB DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 12:47:11

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

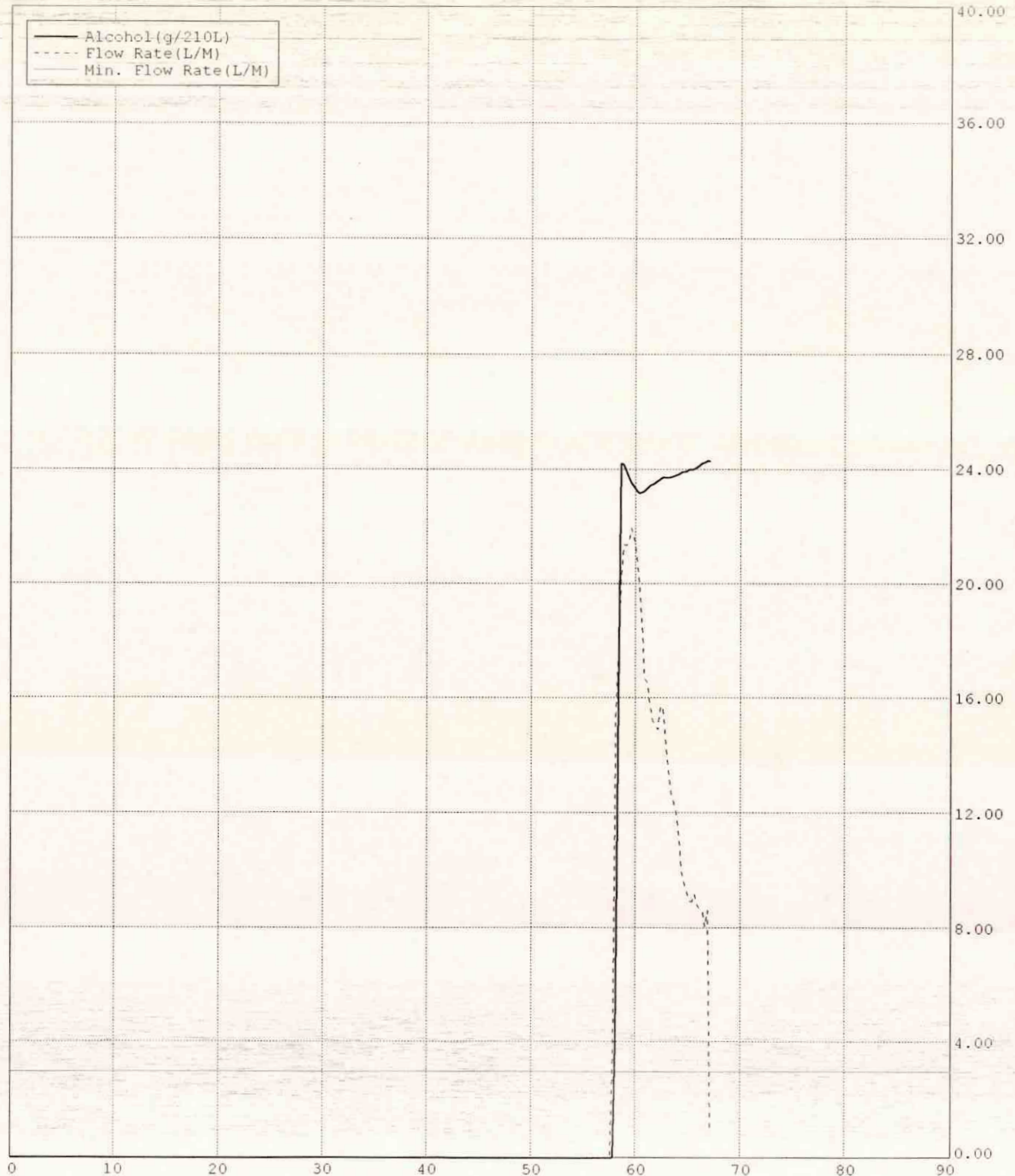
DIAGNOSTIC CHECK	PASSED	12:48
BLANK TEST	0.000	12:48
INTERNAL STANDARD	VERIFIED	12:48
Xq = 0.086 (0.10%)		
EXTERNAL STANDARD	0.077	12:49
X[1] = 0.0774 (-0.0023) (0.0020)		
BLANK TEST	0.000	12:49
SUBJECT SAMPLE	XXX	12:51
X[1] = 0.1221 (-0.0312) (0.0009)		

Interference Detected

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

DJW

CKB
DJW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 12:57:15

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

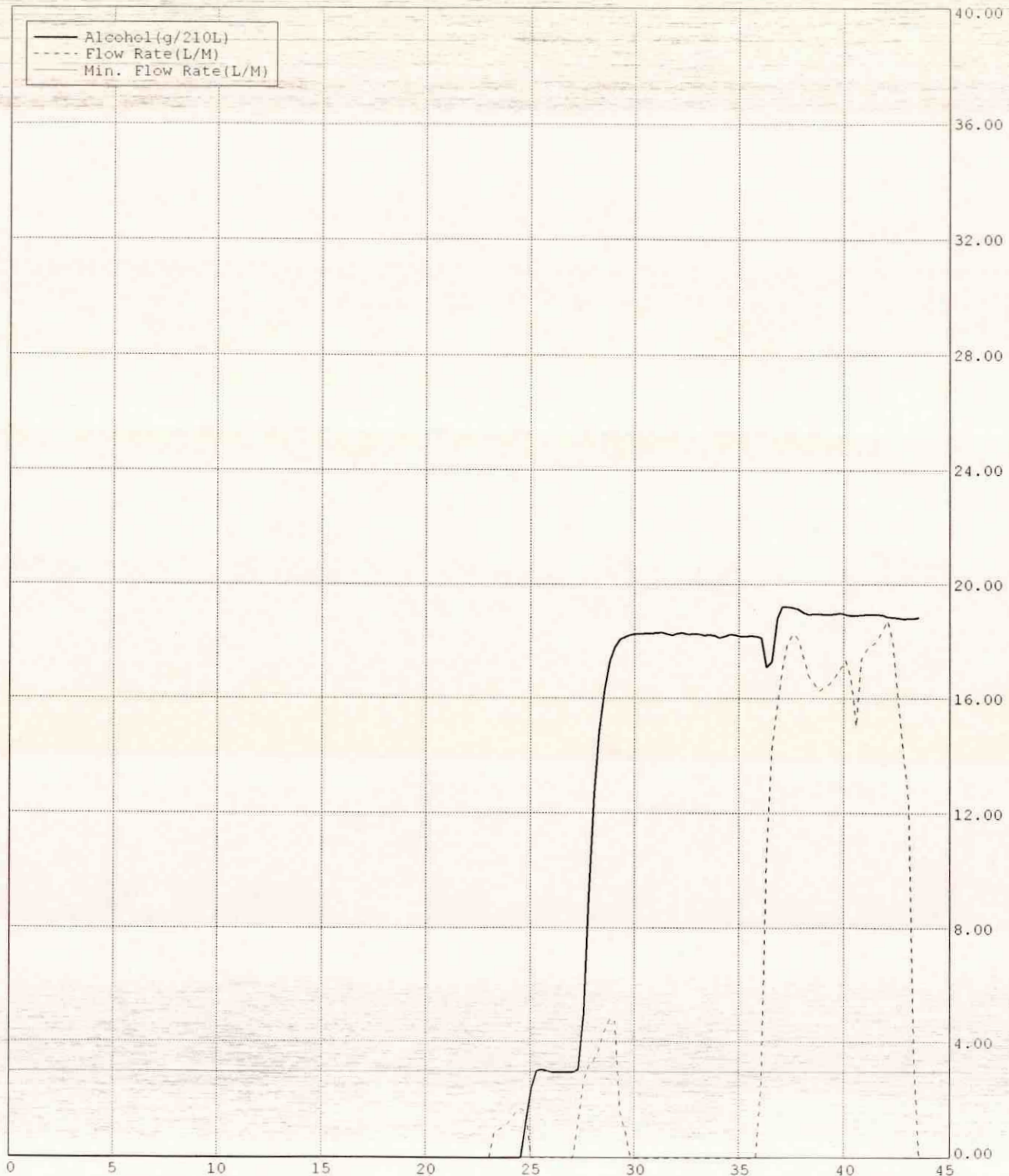
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.76: 0.080

DIAGNOSTIC CHECK	PASSED	12:58
BLANK TEST	0.000	12:58
INTERNAL STANDARD	VERIFIED	12:58
Xq = 0.087 (1.11%)		
EXTERNAL STANDARD	0.078	12:58
X[1] = 0.0782 (-0.0008) (0.0029)		
BLANK TEST	0.000	12:59
SUBJECT SAMPLE (Vol=1.95L)	0.094	13:00
X[1] = 0.0948 (-0.0016) (0.0003)		
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.078	13:01
X[1] = 0.0777 (-0.0001) (0.0028)		
BLANK TEST	0.000	13:02

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

Daw

CKB *Daw*



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 12:23:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *DMW*
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

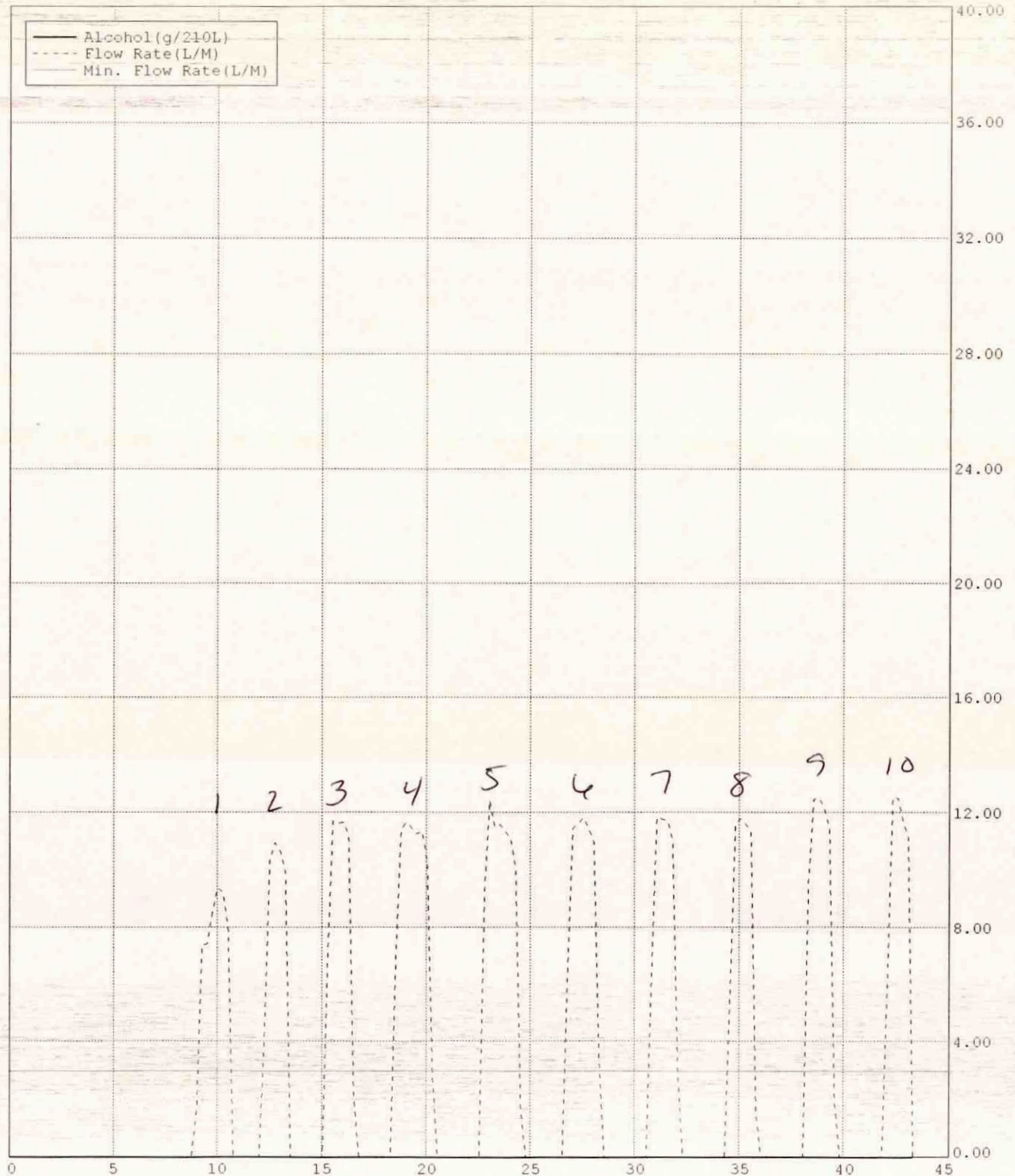
DIAGNOSTIC CHECK	PASSED	12:24
BLANK TEST	0.000	12:24
INTERNAL STANDARD	VERIFIED	12:24
EXTERNAL STANDARD	0.078	12:24
BLANK TEST	0.000	12:25
SUBJECT SAMPLE	XXX	12:26

Maximum Attempts Exceeded

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

DMW

CKB DMW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 12:40:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME: *Daw*
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	12:41
BLANK TEST	0.000	12:42
INTERNAL STANDARD	VERIFIED	12:42
EXTERNAL STANDARD	0.078	12:42
BLANK TEST	0.000	12:43

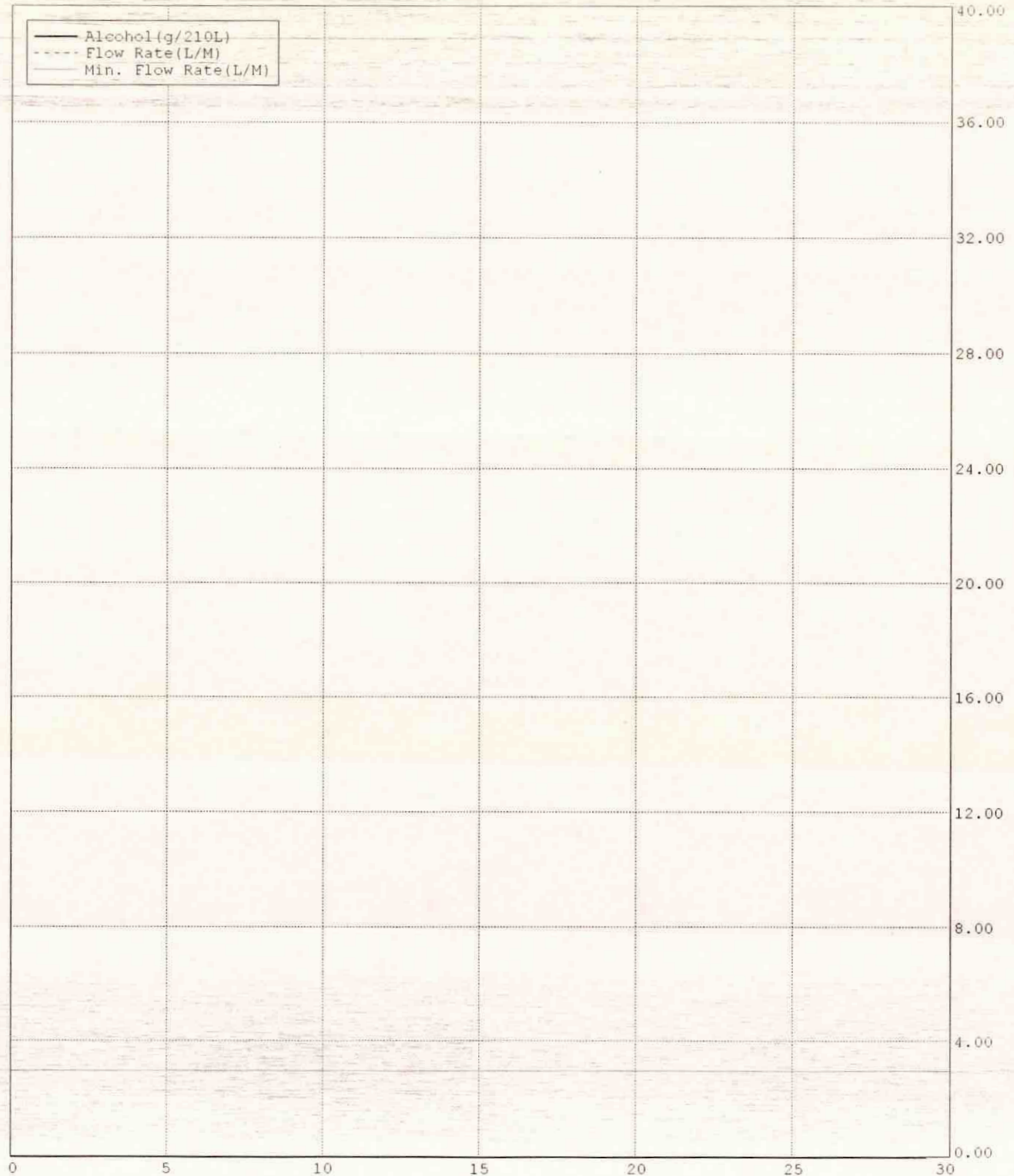
RFI DETECTED

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

Daw

CKB Daw

— Alcohol(g/210L)
- - - Flow Rate(L/M)
- - - Min. Flow Rate(L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100412

Date: 05/25/2021
Time: 13:46:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
CARLIE BAILEY *CB*
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	13:47
BLANK TEST	0.000	13:47
INTERNAL STANDARD	VERIFIED	13:47
EXTERNAL STANDARD	0.078	13:47
BLANK TEST	0.000	13:48
SUBJECT SAMPLE (Vol=2.23L)	0.000	13:49
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.078	13:50
BLANK TEST	0.000	13:51

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

CB

CKB *CB*

