

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Issued: 7/10/2015  
Effective: 7/10/2015

Version: DMCEF 2015 R1  
Status: Active

Instrument S/N 100345 Analyst C. O Bryant Start Date 4/28/20

1. Diagnostic Test (attached)  Internal Standard value  $\leq 3.00\%$  Yes
1. Voltage Checks
- a. 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)
  - b. Set RFI
  - c. Adjust barometer reading to match NIST traceable barometer
  - d. Adjust volume setting, if needed (1.5L +/- 0.1L)
  - e. Print Technician Screen (attached)

2. Print Calibration Factors (attached)

3. Volume Test - Minimum 1.6 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Argas Lot AG 928203 Exp 10/9/21
- ii. 0.040g/210L Mnf Argas Lot AG 915607 Exp 6/5/21
- iii. 0.080g/210L Mnf Argas Lot AG 826101 Exp 9/18/20
- iv. 0.100g/210L Mnf Argas Lot AG 924701 Exp 9/4/21
- v. 0.200g/210L Mnf Guth Lot 19200 Exp 8/6/21
  - 1. Simulator S/N DR4176 Date Calibrated 10/7/19
- vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/21
  - 1. Simulator S/N DR4178 Date Calibrated 10/4/19

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21

- 1. Simulator S/N DR4162 Date Calibrated 10/7/19

ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21

- 1. Simulator S/N DR4163 Date Calibrated 10/4/19

iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21

- 1. Simulator S/N SD1176 Date Calibrated 10/7/19

e. RFI

- 6. Verify stylus is calibrated
- 7. Reset Options
- 8. Clear Memory

- 9. Verification of Calibration
- 10. Non-Drinking Subject Test (attached)
- 11. Upload
- 13. Remove tank prior to shut down

End Date 4/28/20

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100345  
-----

Date: 04/28/2020  
Time: 11:12:39

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C                    PASSED  
(44.0°C - 52.0°C)  
Breath Tube       = 47.0°C                PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage     = 1.64 V                PASSED  
(0.98 V - 2.30 V)  
Cooler Voltage   = 1.76 V                PASSED  
(1.06 V - 2.46 V)  
Bias Voltage     = 80 V                    PASSED  
(48 V - 112 V)  
Chopper Freq    = 530 Hz                    PASSED  
(475 Hz - 575 Hz)  
Barometer        = 29.3 in

PUMP INFO

Flow Rate = 4.159 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 = 0.093 0.84% (0.00% - 4.00%)                    PASSED

Technician Screen

-----  
DATAMASTER dmt: 100345  
-----

Date: 04/28/2020  
Time: 11:23 AM

Temperatures (°C)

Sample Cell: 48.8°C  
Breath Tube: 46.7°C

Current Barometer 29.4 in  
Volume (Ltr) 1.50

Settings

Lamp: 1.72 V  
Bias: 80 V  
Cooler: 1.66 V  
Chopper: 529 Hz

Voltages (V)

Flow: 1.06 V  
Detector: 0.048 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100345  
-----

Date: 04/21/2020  
Time: 08:59:17

OPERATOR NAME:  
COLLEEN S OBRYANT  
CERTIFICATE #: 6237

Ca = 0.1000  
CAL = 0.961339    0.800 <= CAL < 1.200  
b1 = 0.0008    0.0000 <= b1 < 0.0040  
b2 = 0.0048    0.0010 <= b2 < 0.0100  
b3 = 0.0005    0.0000 <= b3 < 0.0040  
Xq = 0.0936    0.0500 <= Xq < 0.2000  
a21 = 1.153238    1.050 <= a21 < 1.300  
a31 = 0.500724    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

Date: 04/28/2020  
Time: 11:24:30

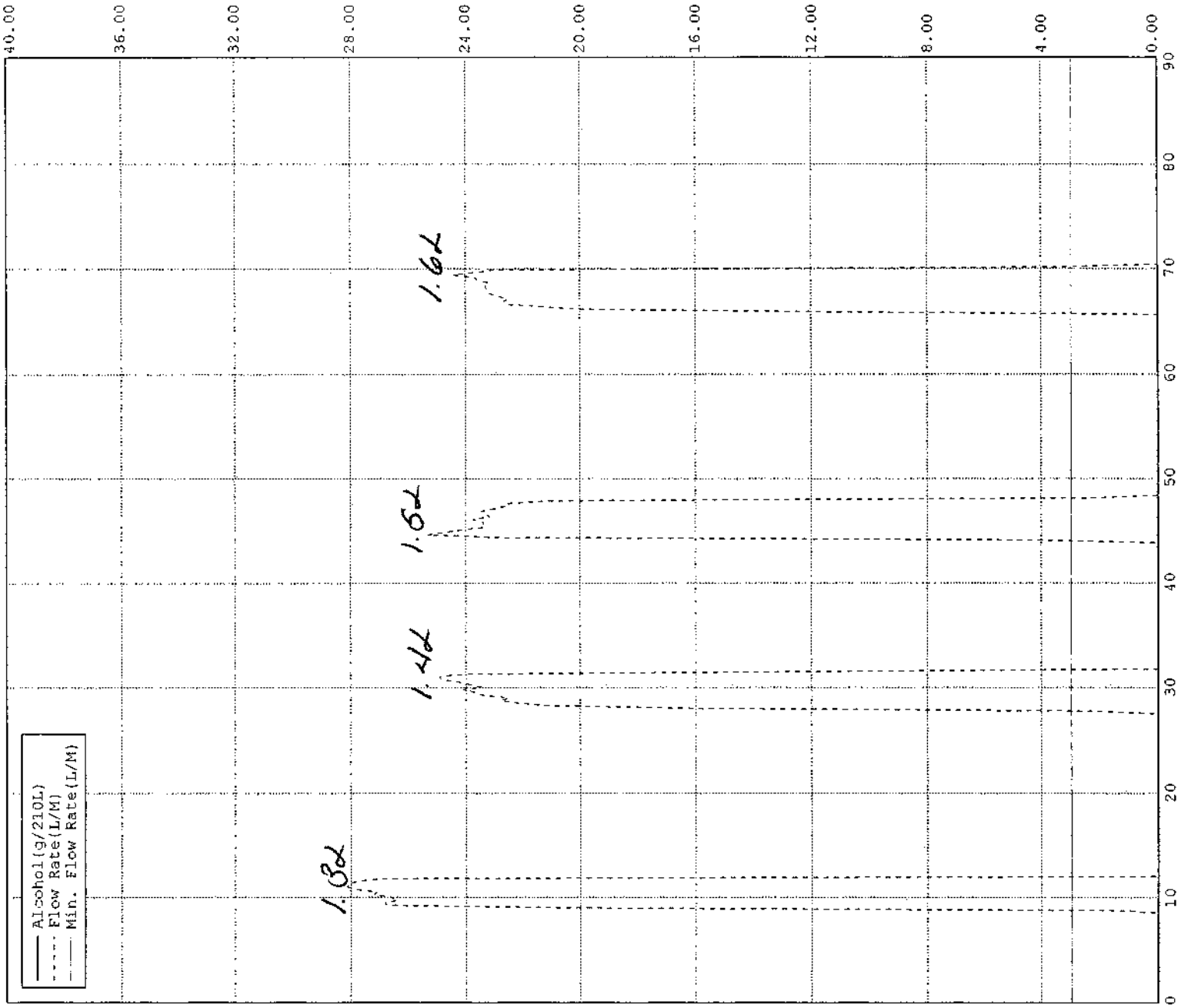
SUBJECT NAME:  
TEST TEST  
LICENSE #: MIN. VOLUME

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 20-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.36: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:26
BLANK TEST	0.000	11:26
INTERNAL STANDARD	VERIFIED	11:26
EXTERNAL STANDARD	0.075	11:26
BLANK TEST	0.000	11:27
SUBJECT SAMPLE (Vol=1.59L)	0.000	11:28
BLANK TEST	0.000	11:29
EXTERNAL STANDARD	0.076	11:29
BLANK TEST	0.000	11:30



LINEARITY CHECK

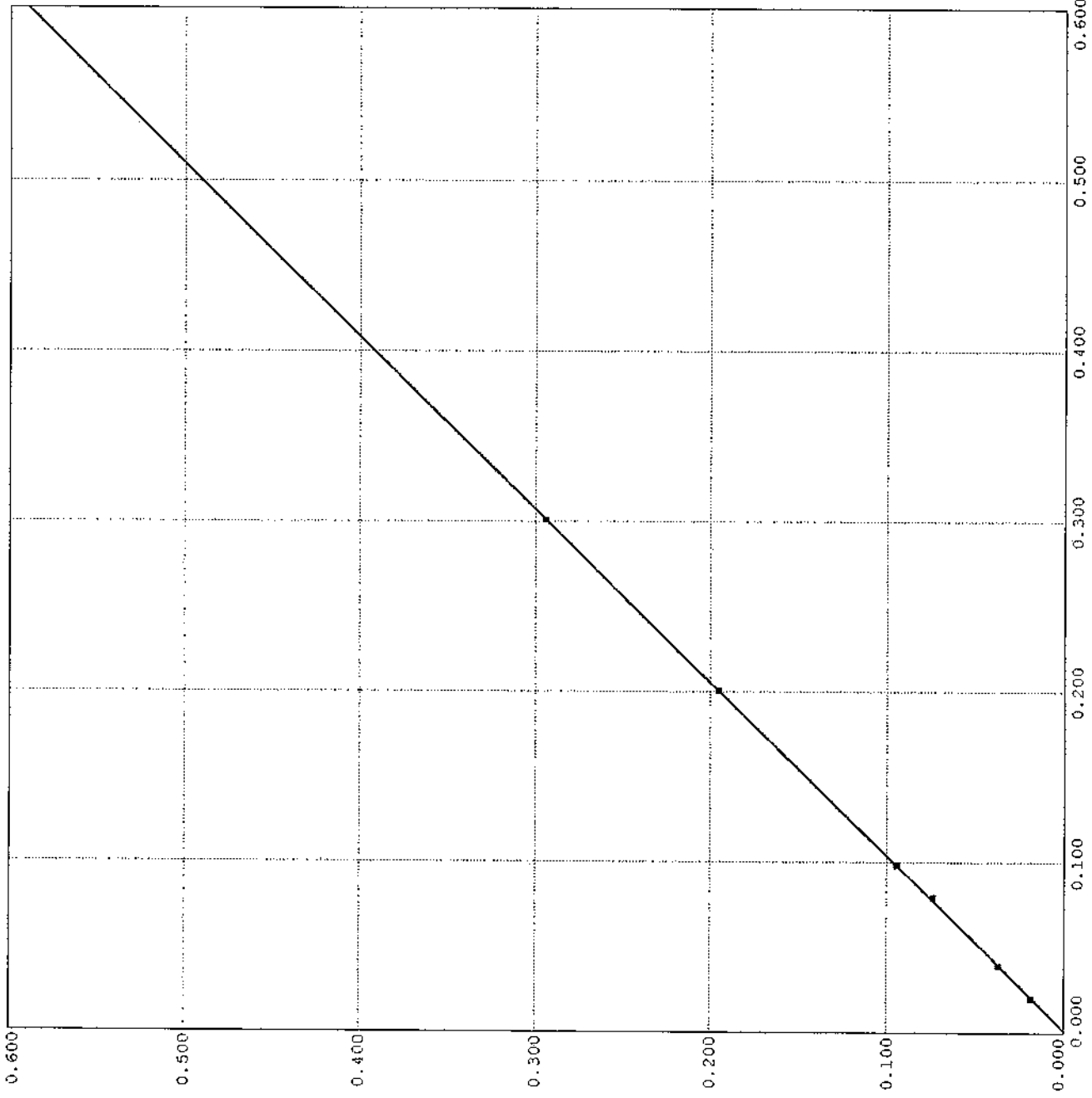
Alaska Department of Public Safety  
 DATAMASTER dmt: 100345

Date: 04/28/2020  
 Time: 11:34:51

SUPERVISOR NAME:  
 COLLEEN S O'BRYAN  
 OPERATOR'S #: 6237

TARGET	AVERAGE	STD. DEV.
0.020	0.0192	0.0004
0.039	0.0380	0.0000
0.079	0.0750	0.0000
0.098	0.0954	0.0005
0.200	0.1962	0.0004
0.300	0.2948	0.0004

SLOPE = 0.985885  
 R<sup>2</sup> = 0.999929



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100345

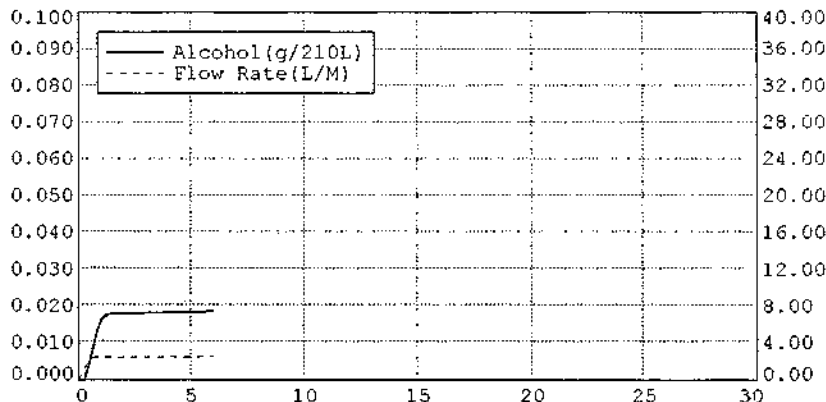
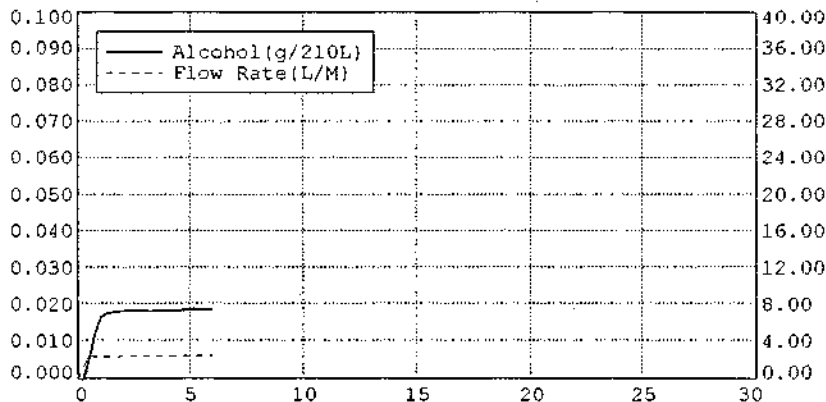
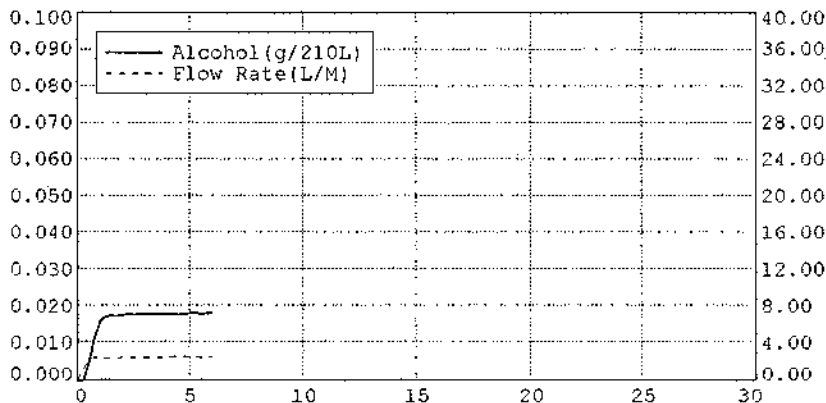
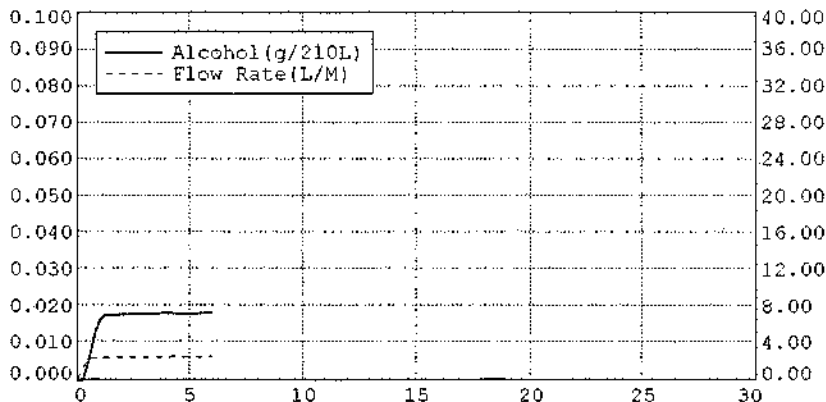
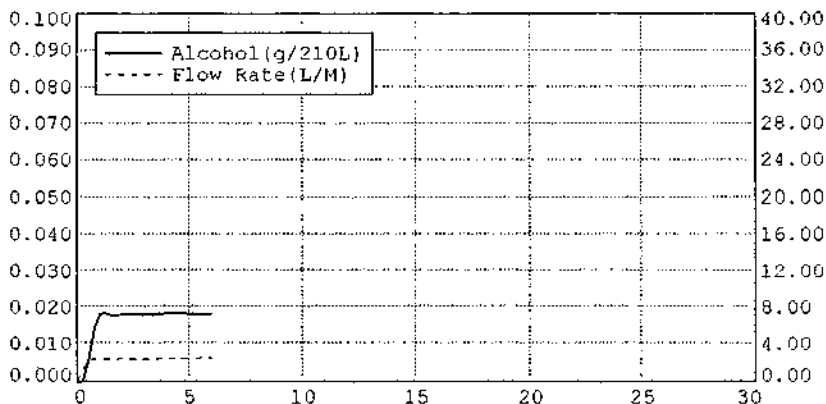
Date: 04/28/2020  
 Time: 11:34:54

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.37: 0.020  
 LOT #: AG928203  
 EXPIRATION: 10/09/2021  
 TANK PRESSURE: 1025 psi

BLANK TEST	0.000	11:42
INTERNAL STANDARD	VERIFIED	11:42
EXTERNAL STANDARD	0.020	11:42
BLANK TEST	0.000	11:43
EXTERNAL STANDARD	0.019	11:44
BLANK TEST	0.000	11:44
EXTERNAL STANDARD	0.019	11:45
BLANK TEST	0.000	11:46
EXTERNAL STANDARD	0.019	11:46
BLANK TEST	0.000	11:47
EXTERNAL STANDARD	0.019	11:47
BLANK TEST	0.000	11:48

Average = 0.0192  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100345

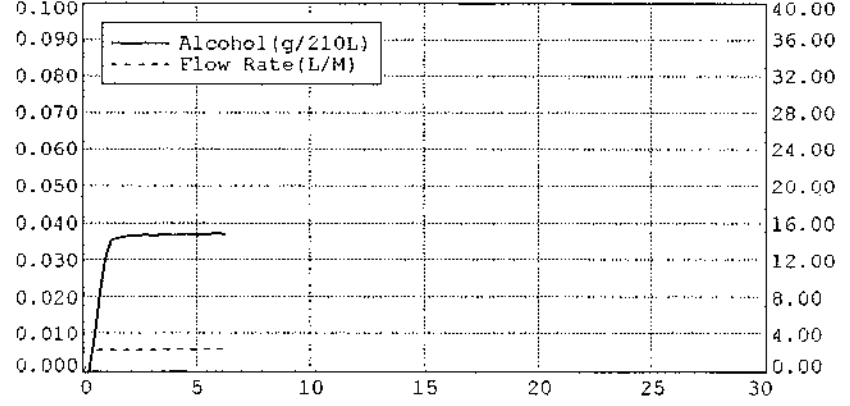
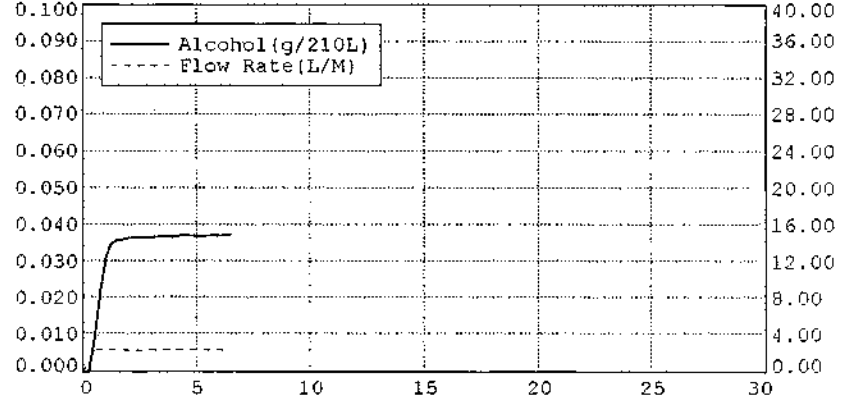
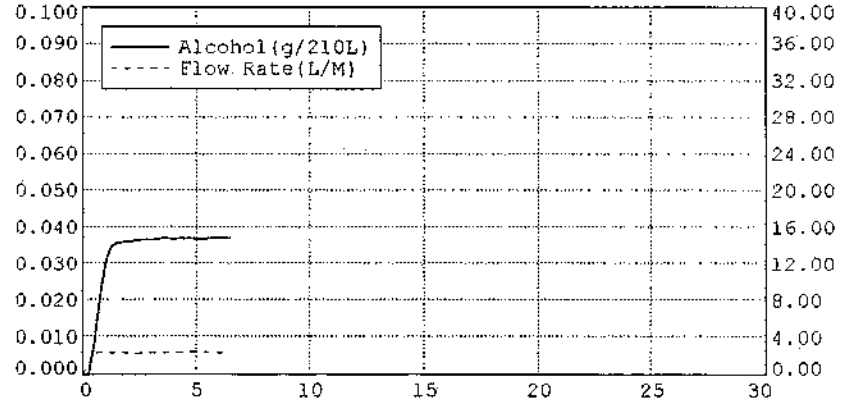
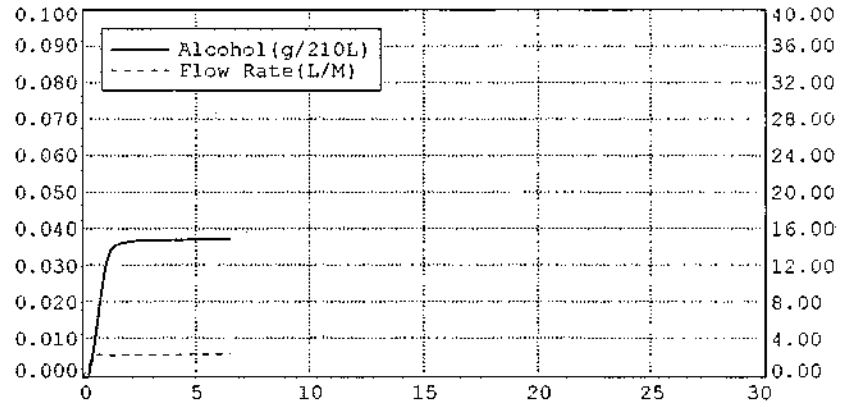
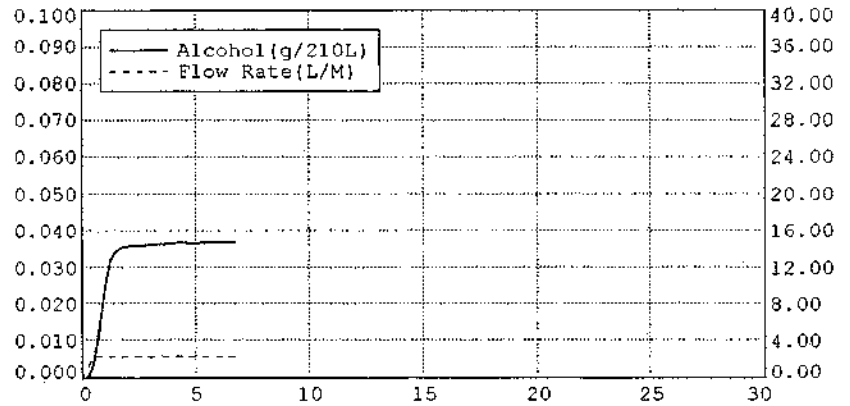
Date: 04/28/2020  
 Time: 11:53:56

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.37: 0.039  
 LOT #: AG915607  
 EXPIRATION: 06/05/2021  
 TANK PRESSURE: 847 psi

BLANK TEST	0.000	11:55
INTERNAL STANDARD	VERIFIED	11:55
EXTERNAL STANDARD	0.038	11:55
BLANK TEST	0.000	11:56
EXTERNAL STANDARD	0.038	11:56
BLANK TEST	0.000	11:57
EXTERNAL STANDARD	0.038	11:57
BLANK TEST	0.000	11:58
EXTERNAL STANDARD	0.038	11:58
BLANK TEST	0.000	11:59
EXTERNAL STANDARD	0.038	11:59
BLANK TEST	0.000	12:00

Average = 0.0380  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100345

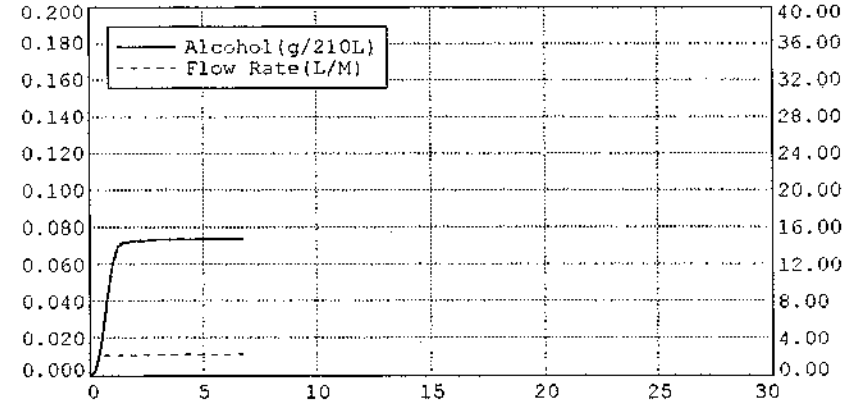
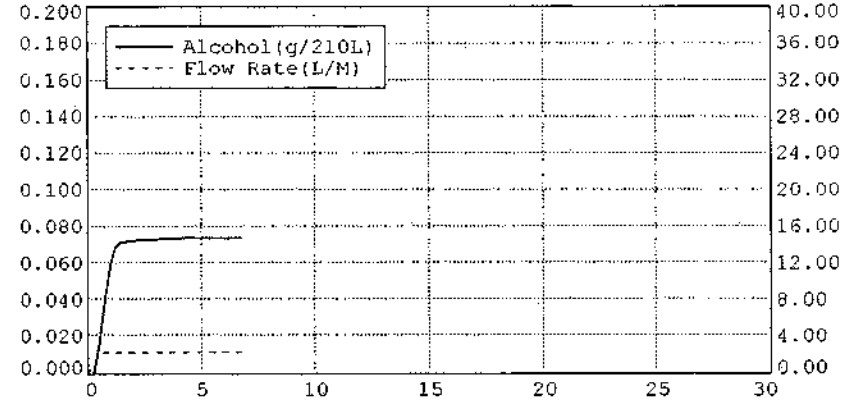
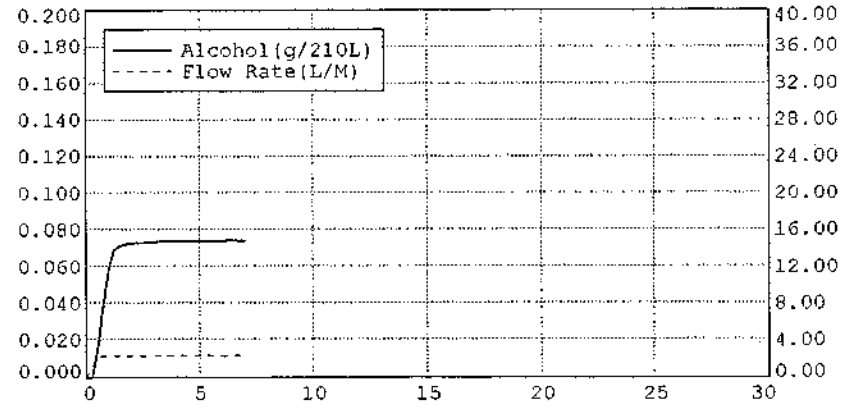
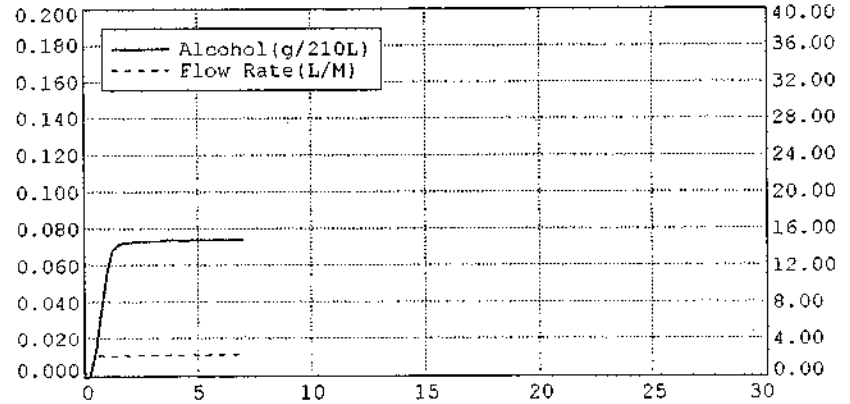
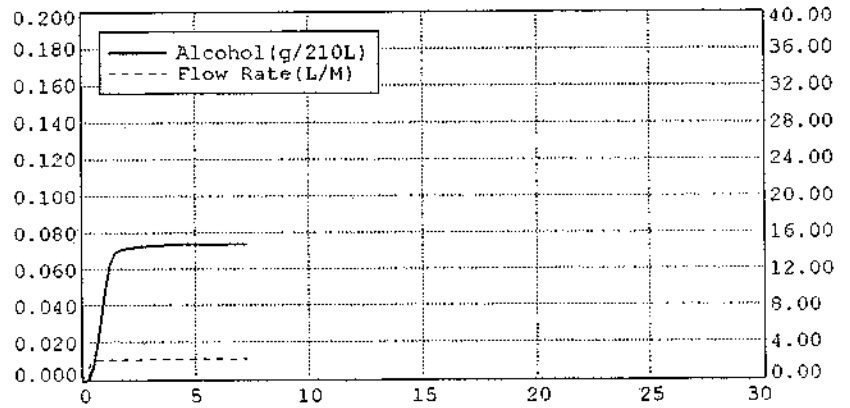
Date: 04/28/2020  
 Time: 12:01:08

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.37: 0.079  
 LOT #: AG826101  
 EXPIRATION: 09/18/2020  
 TANK PRESSURE: 604 psi

BLANK TEST	0.000	12:02
INTERNAL STANDARD	VERIFIED	12:02
EXTERNAL STANDARD	0.075	12:02
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.075	12:03
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.075	12:04
BLANK TEST	0.000	12:05
EXTERNAL STANDARD	0.075	12:06
BLANK TEST	0.000	12:06
EXTERNAL STANDARD	0.075	12:07
BLANK TEST	0.000	12:08

Average = 0.0750  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

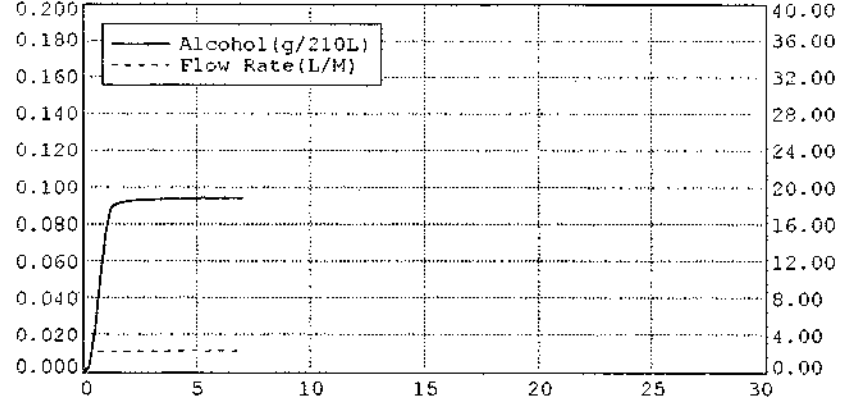
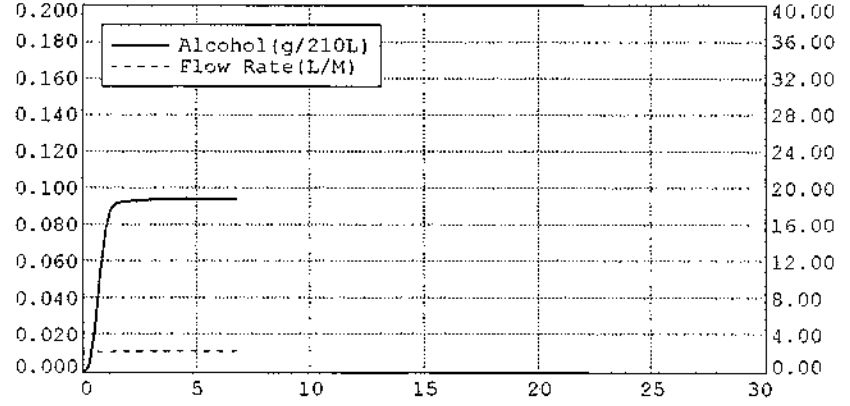
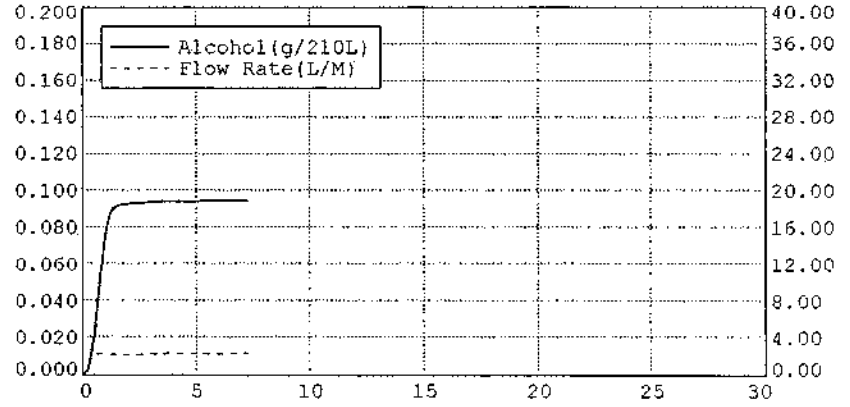
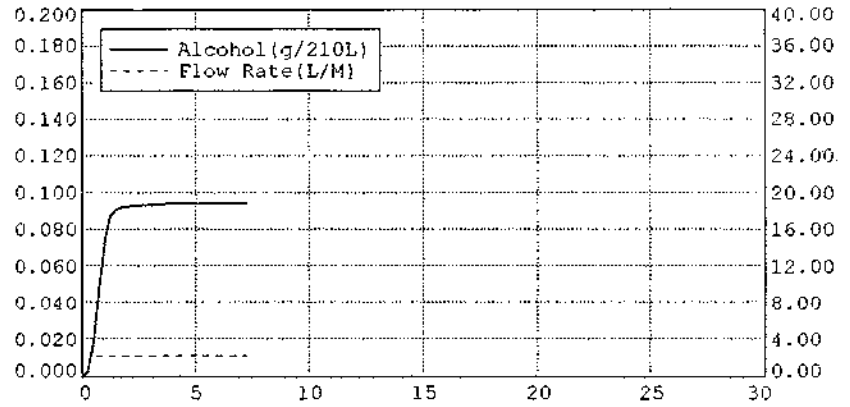
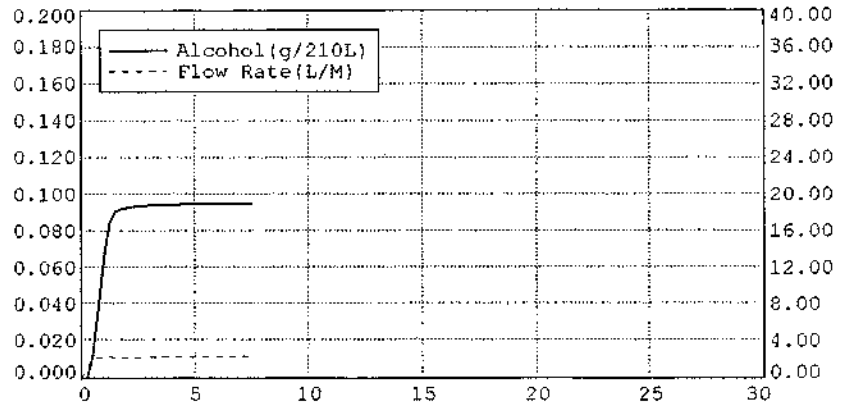
Date: 04/28/2020  
Time: 12:11:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
TARGET AT 29.36: 0.098  
LOT #: AG924701  
EXPIRATION: 09/04/2021  
TANK PRESSURE: 630 psi

BLANK TEST	0.000	12:12
INTERNAL STANDARD	VERIFIED	12:12
EXTERNAL STANDARD	0.096	12:12
BLANK TEST	0.000	12:13
EXTERNAL STANDARD	0.095	12:13
BLANK TEST	0.000	12:14
EXTERNAL STANDARD	0.096	12:15
BLANK TEST	0.000	12:16
EXTERNAL STANDARD	0.095	12:16
BLANK TEST	0.000	12:17
EXTERNAL STANDARD	0.095	12:17
BLANK TEST	0.000	12:18

Average = 0.0954  
Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

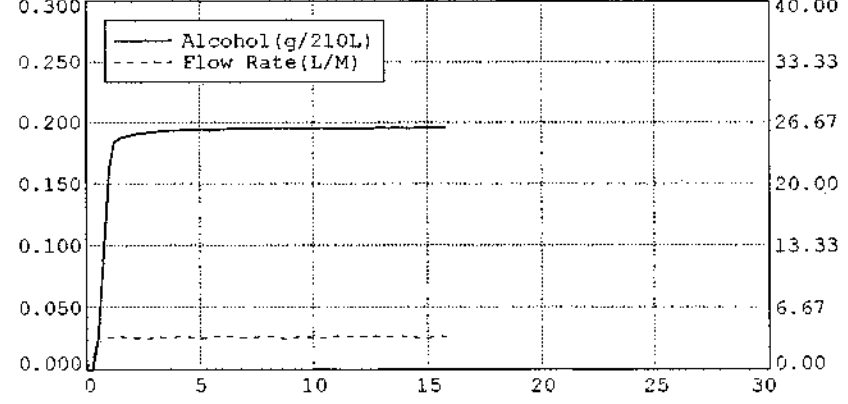
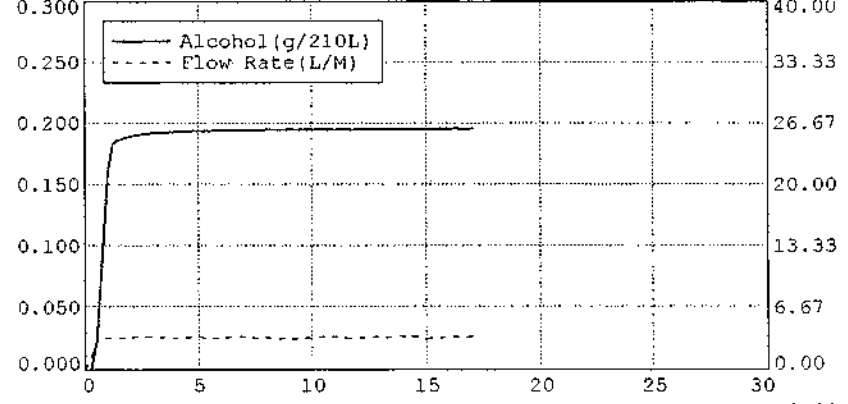
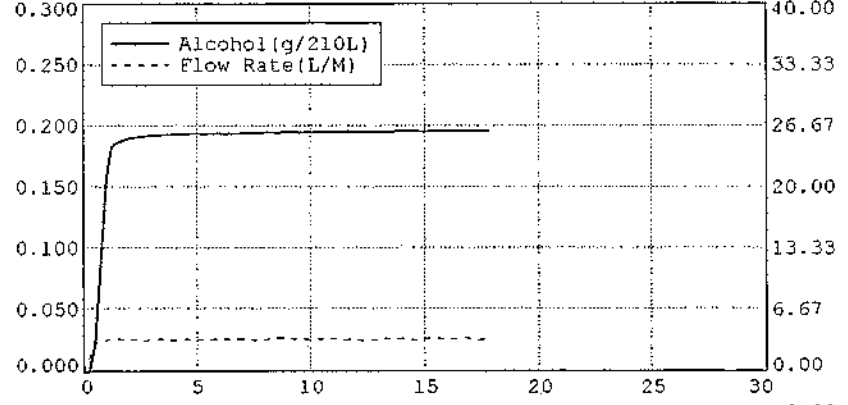
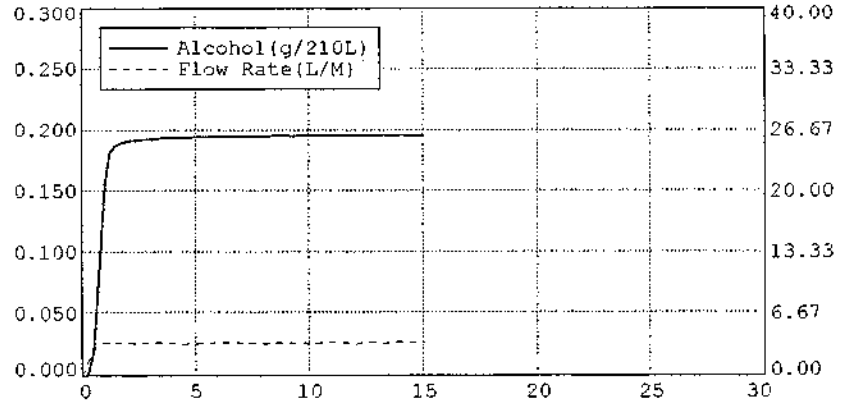
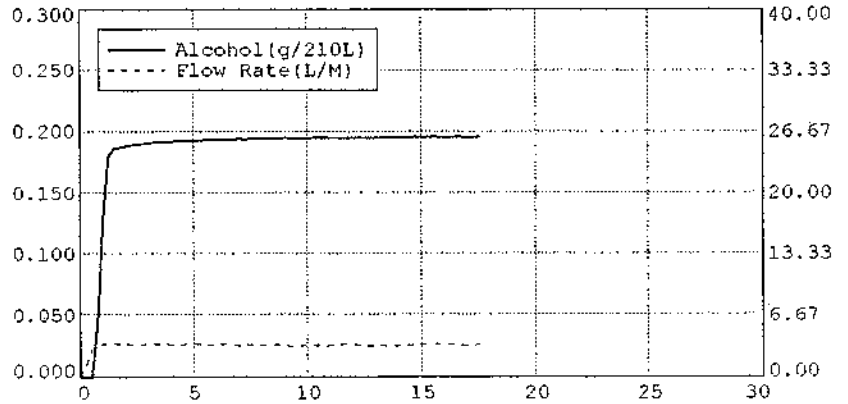
Alaska Department of Public Safety  
 DATAMASTER dmt: 100345

Date: 04/28/2020  
 Time: 12:19:12

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

BLANK TEST	0.000	12:20
INTERNAL STANDARD	VERIFIED	12:20
EXTERNAL STANDARD	0.196	12:21
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.196	12:22
BLANK TEST	0.000	12:23
EXTERNAL STANDARD	0.197	12:23
BLANK TEST	0.000	12:24
EXTERNAL STANDARD	0.196	12:25
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.196	12:26
BLANK TEST	0.000	12:27

Average = 0.1962  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

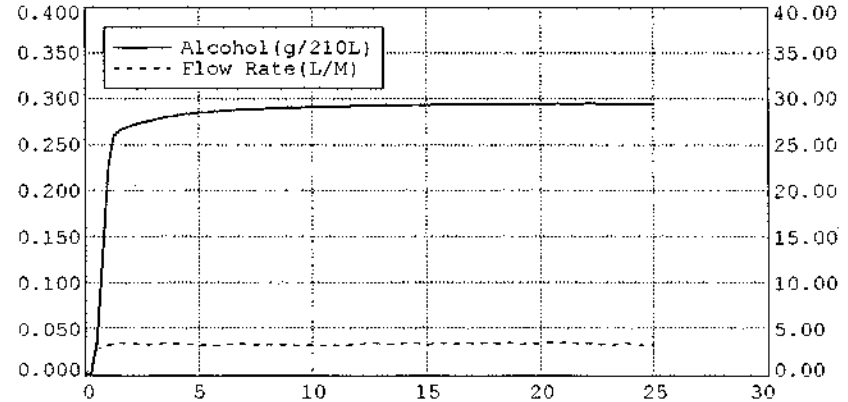
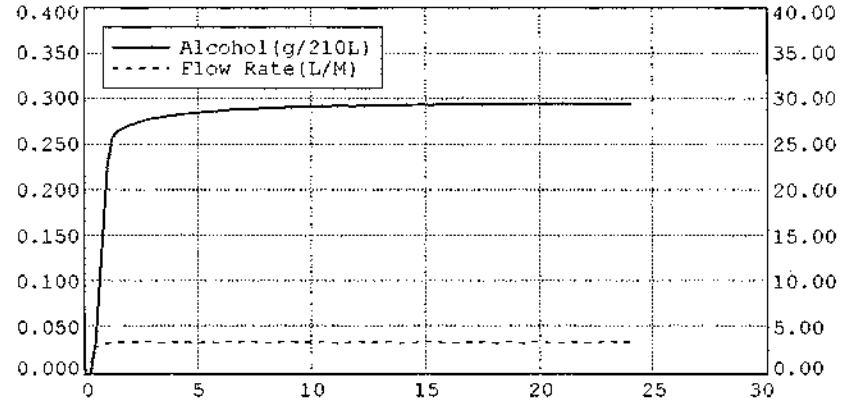
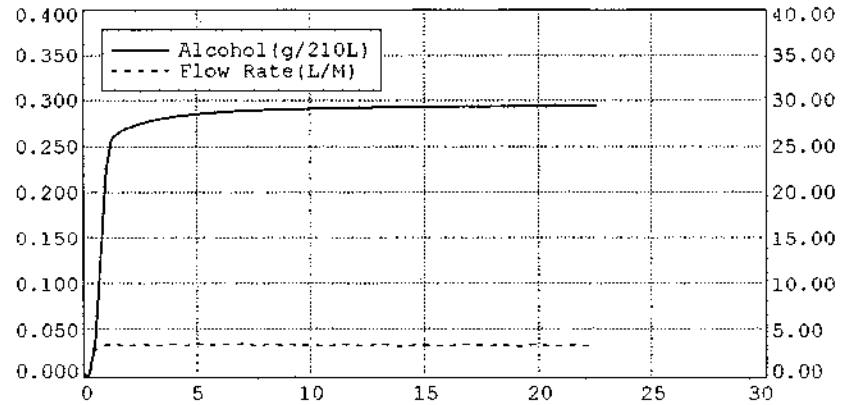
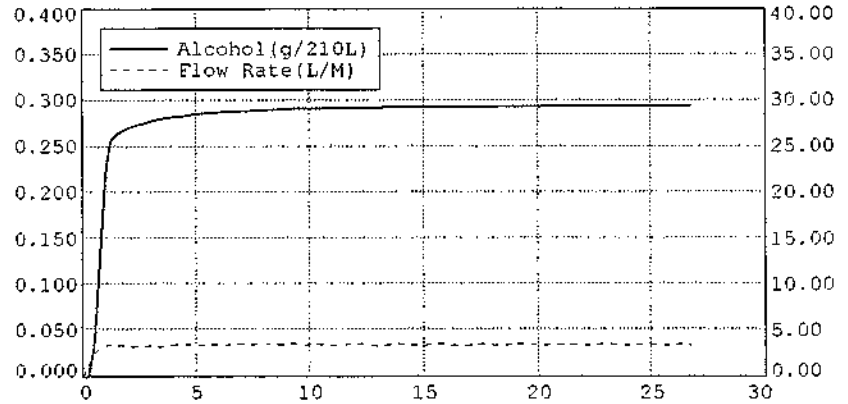
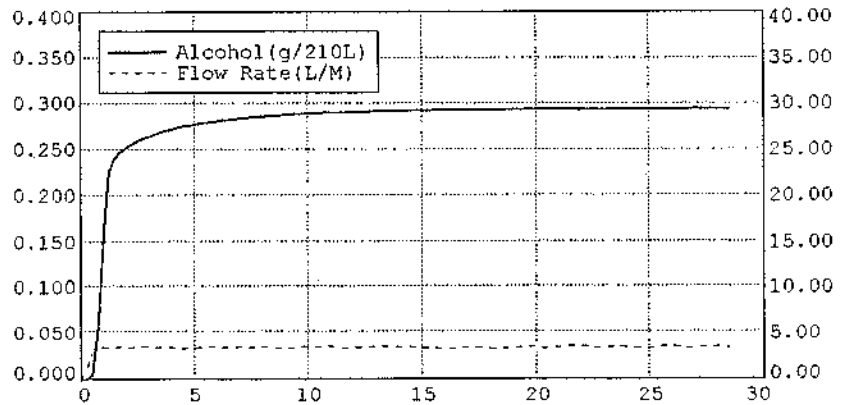
Alaska Department of Public Safety  
 DATAMASTER dmt: 100345

Date: 04/28/2020  
 Time: 12:29:02

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

BLANK TEST	0.000	12:30
INTERNAL STANDARD	VERIFIED	12:30
EXTERNAL STANDARD	0.295	12:30
BLANK TEST	0.000	12:31
EXTERNAL STANDARD	0.294	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.295	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.295	12:35
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.295	12:36
BLANK TEST	0.000	12:37

Average = 0.2948  
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

Date: 04/28/2020  
Time: 13:52:58

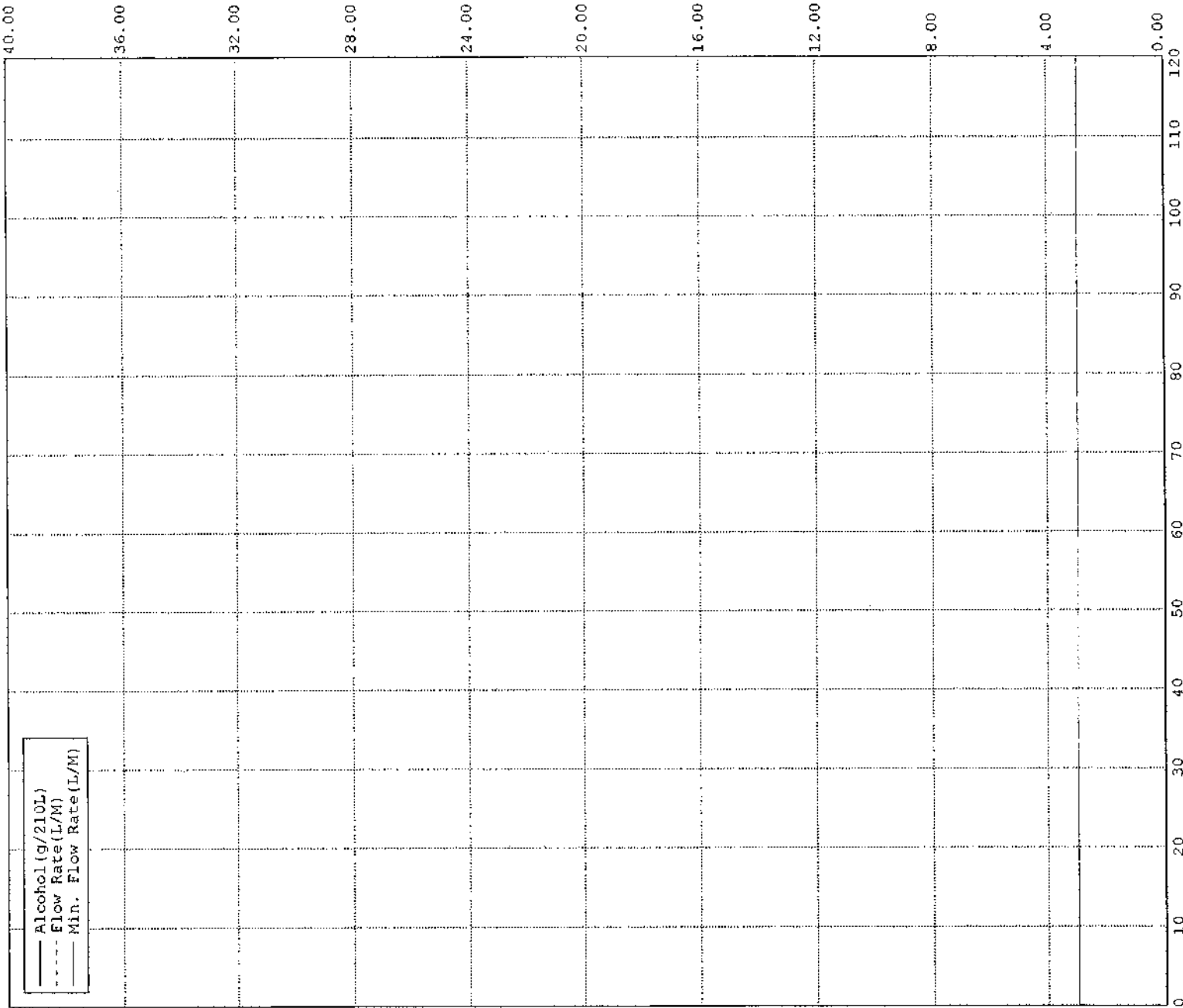
SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

OPERATOR NAME:  
COLLEEN S O'BRYANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 20-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.35: 0.078  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:54  
BLANK TEST 0.000 13:54  
INTERNAL STANDARD VERIFIED 13:54  
EXTERNAL STANDARD 0.075 13:54  
BLANK TEST 0.000 13:55  
SUBJECT SAMPLE INCOMPLETE 13:57



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

Date: 04/28/2020  
Time: 14:08:03

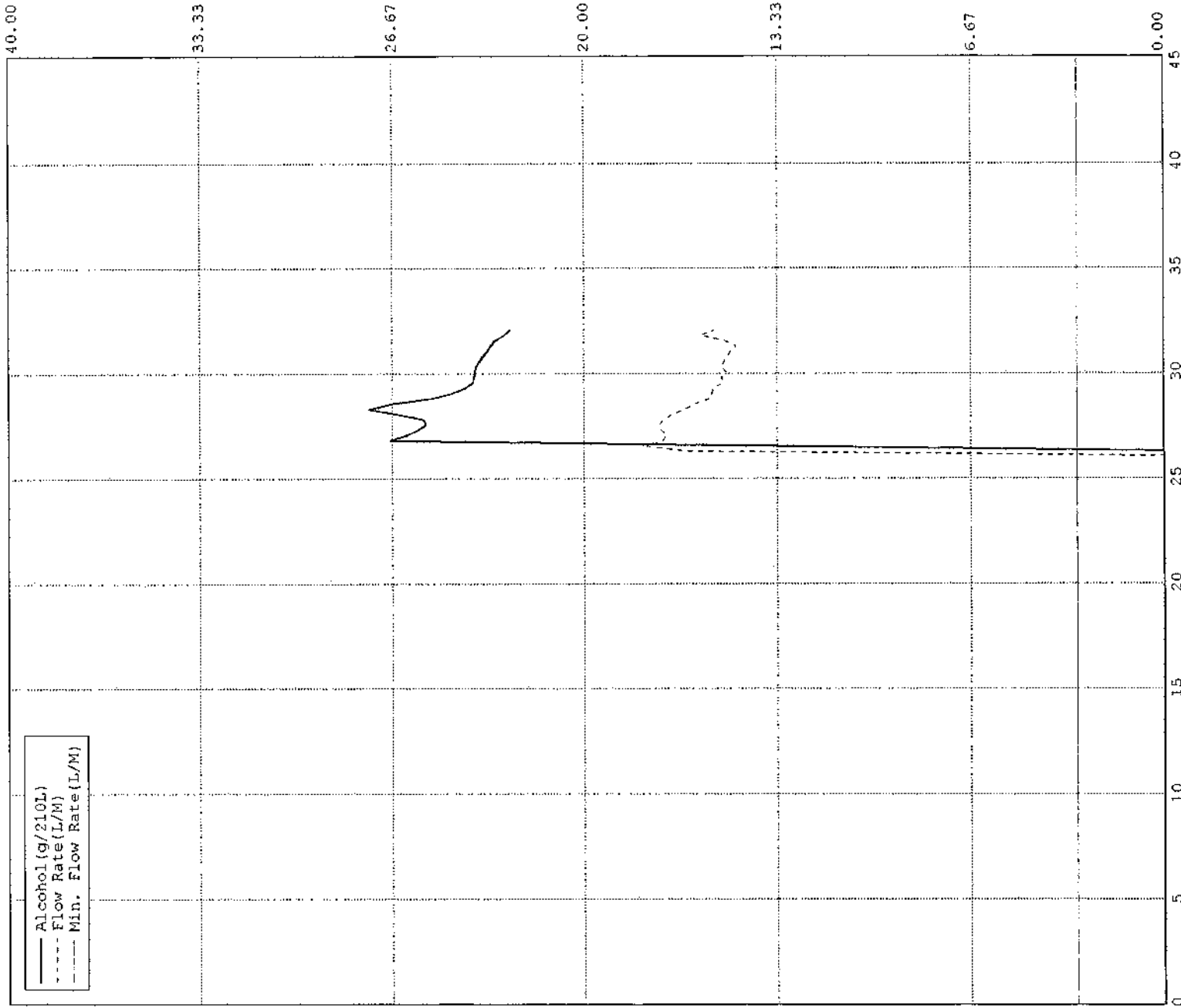
SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 20-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.34: 0.078  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 14:15  
BLANK TEST 0.000 14:15  
INTERNAL STANDARD VERIFIED 14:15  
EXTERNAL STANDARD 0.076 14:15  
BLANK TEST 0.000 14:16  
SUBJECT SAMPLE INVALID 14:17



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

Date: 04/28/2020  
Time: 12:42:21

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-ACETONE

OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAAI  
CASE/REPORT: 20-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.36: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

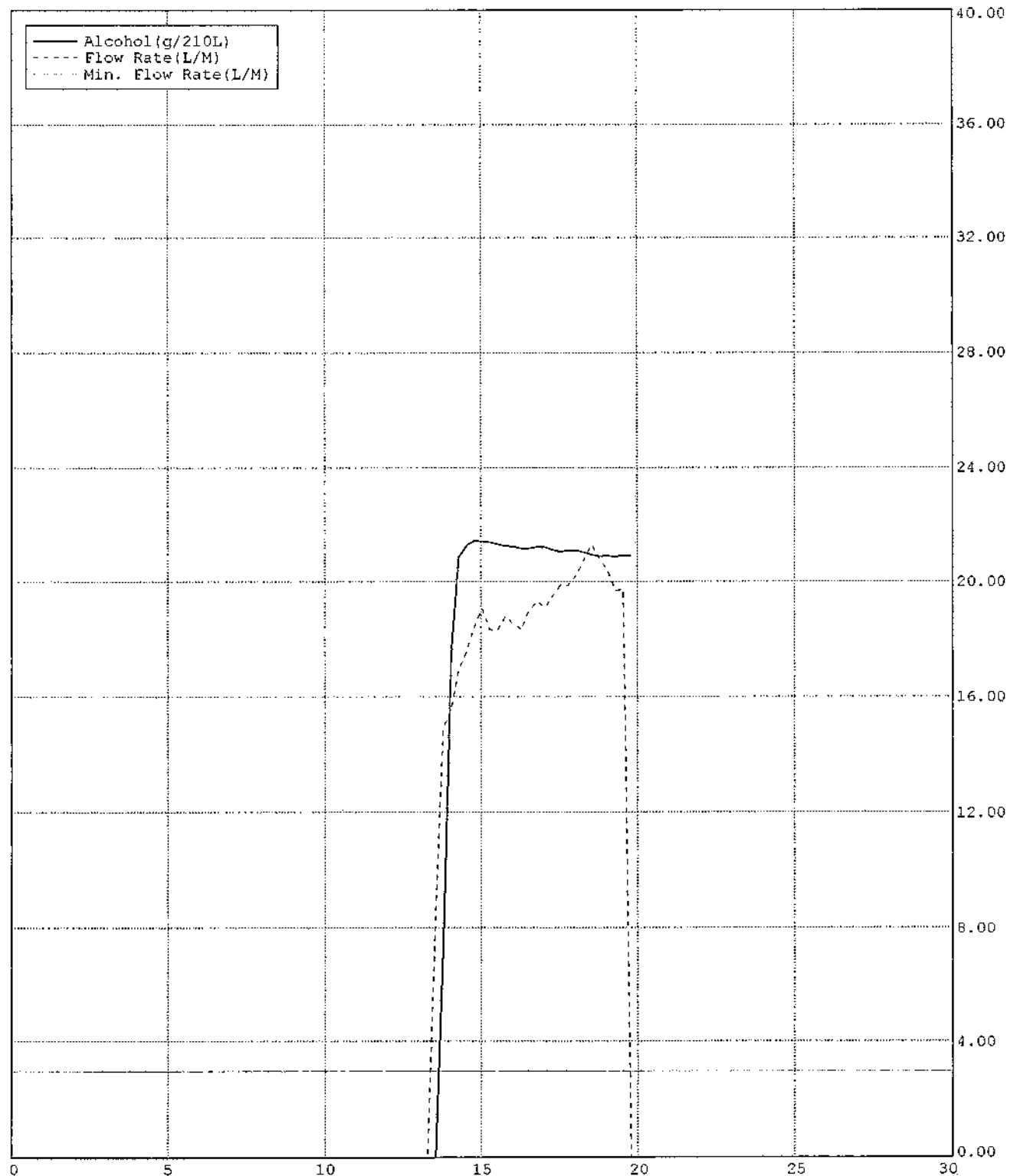
DIAGNOSTIC CHECK	PASSED	12:43
BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
Xq = 0.094 (0.19%)		
EXTERNAL STANDARD	0.074	12:43
X[1] = 0.0744 (-0.0003) (0.0035)		
BLANK TEST	0.000	12:44
SUBJECT SAMPLE	XXX	12:45
X[1] = 0.1044 (-0.0151) (0.0030)		

Interference Detected

*Filter 2 avg = 0.0001*  
~~*Filter 2 avg = 0.0000*~~

~~*Filter 3 avg = 0.0084*~~  
COB 05/07/2020

Filter 3 Avg = 0.0034



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

Date: 04/28/2020  
Time: 12:47:49

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

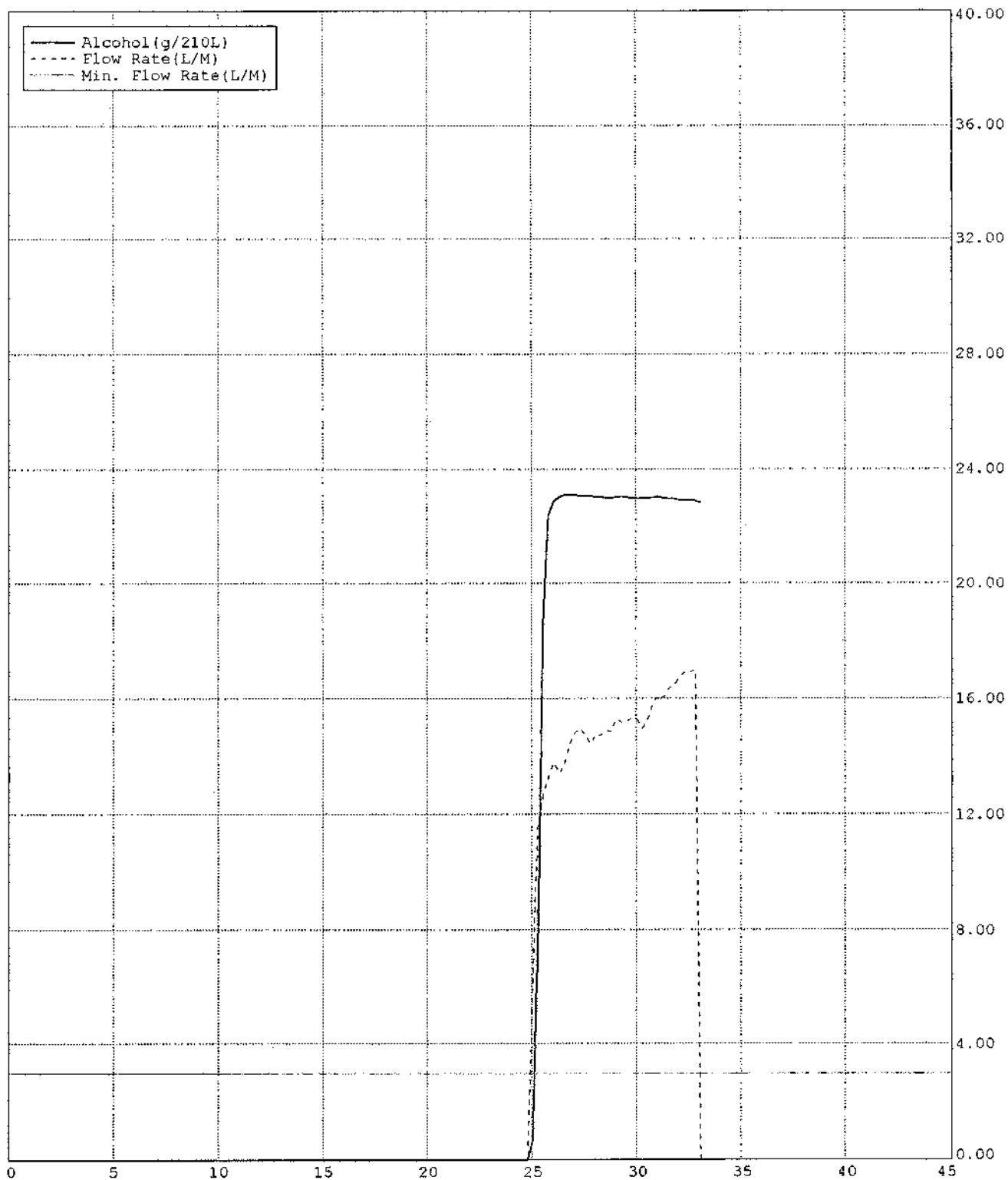
OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 20-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.37: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:48
BLANK TEST	0.000	12:48
INTERNAL STANDARD	VERIFIED	12:49
Xq = 0.094 (0.37%)		
EXTERNAL STANDARD	0.075	12:49
X[1] = 0.0749 (0.0001) (0.0038)		
BLANK TEST	0.000	12:50
SUBJECT SAMPLE	XXX	12:50
X[1] = 0.1141 (-0.0242) (0.0017)		

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
 DAYMASTER dmt: 100345

Date: 04/28/2020  
 Time: 12:54:35

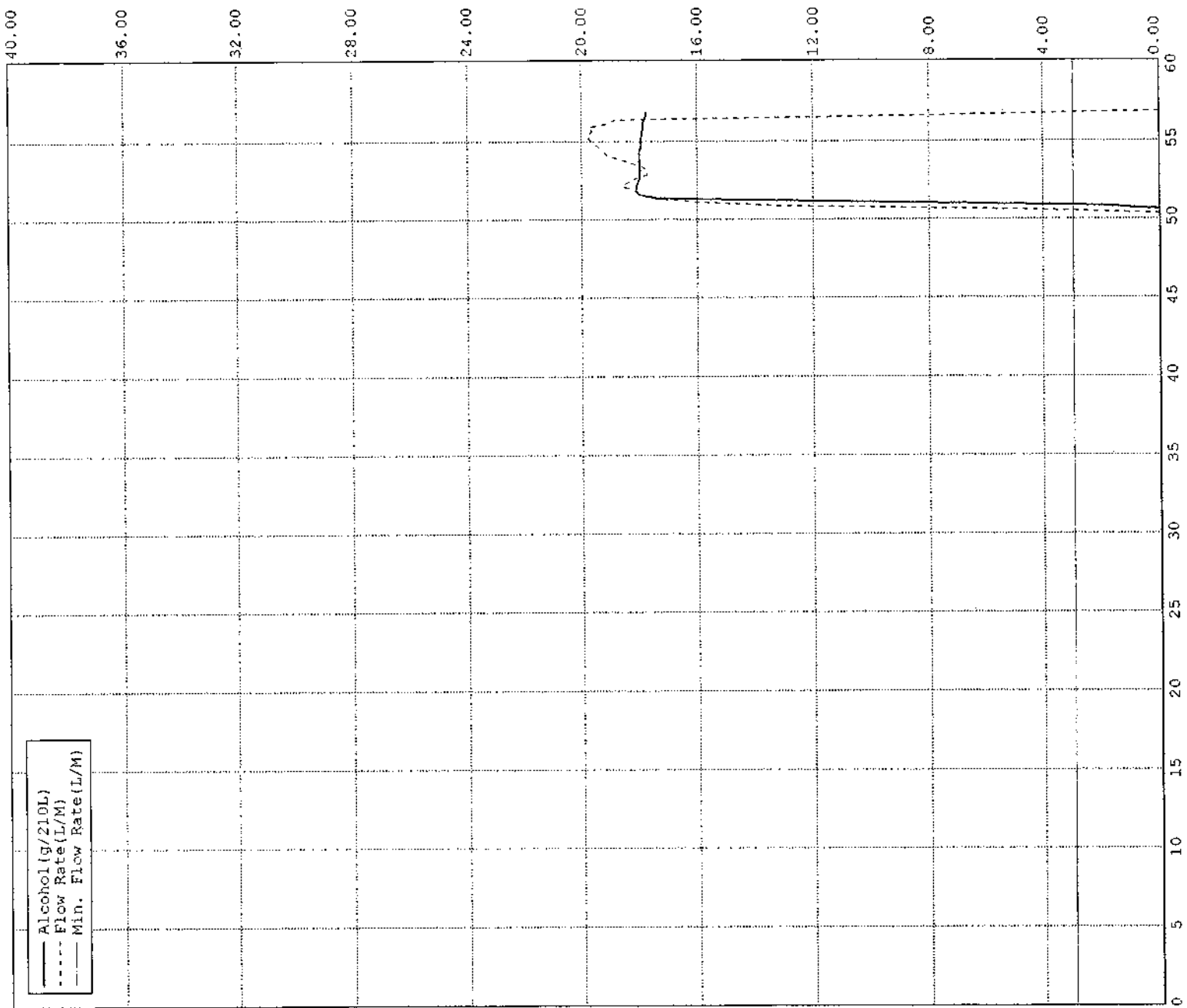
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: INT-NEGATIVE

OPERATOR NAME:  
 COLLEEN S O'BRYANT  
 OPERATOR'S #: 6237

DEPT/AGENCY:  
 AAA1  
 CASE/REPORT: 20-1234  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.36: 0.079  
 LOF #: AG826101  
 EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:55
BLANK TEST	0.000	12:55
INTERNAL STANDARD	VERIFIED	12:55
Xq = 0.093 (0.37%)		
EXTERNAL STANDARD	0.075	12:56
X[1] = 0.0746 (0.0001) (0.0033)		
BLANK TEST	0.000	12:56
SUBJECT SAMPLE (Vol=1.81L)	0.089	12:57
X[1] = 0.0890 (0.0002) (0.0013)		
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.075	12:59
X[1] = 0.0748 (0.0003) (0.0030)		
BLANK TEST	0.000	13:00



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

Date: 04/28/2020  
Time: 13:03:15

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

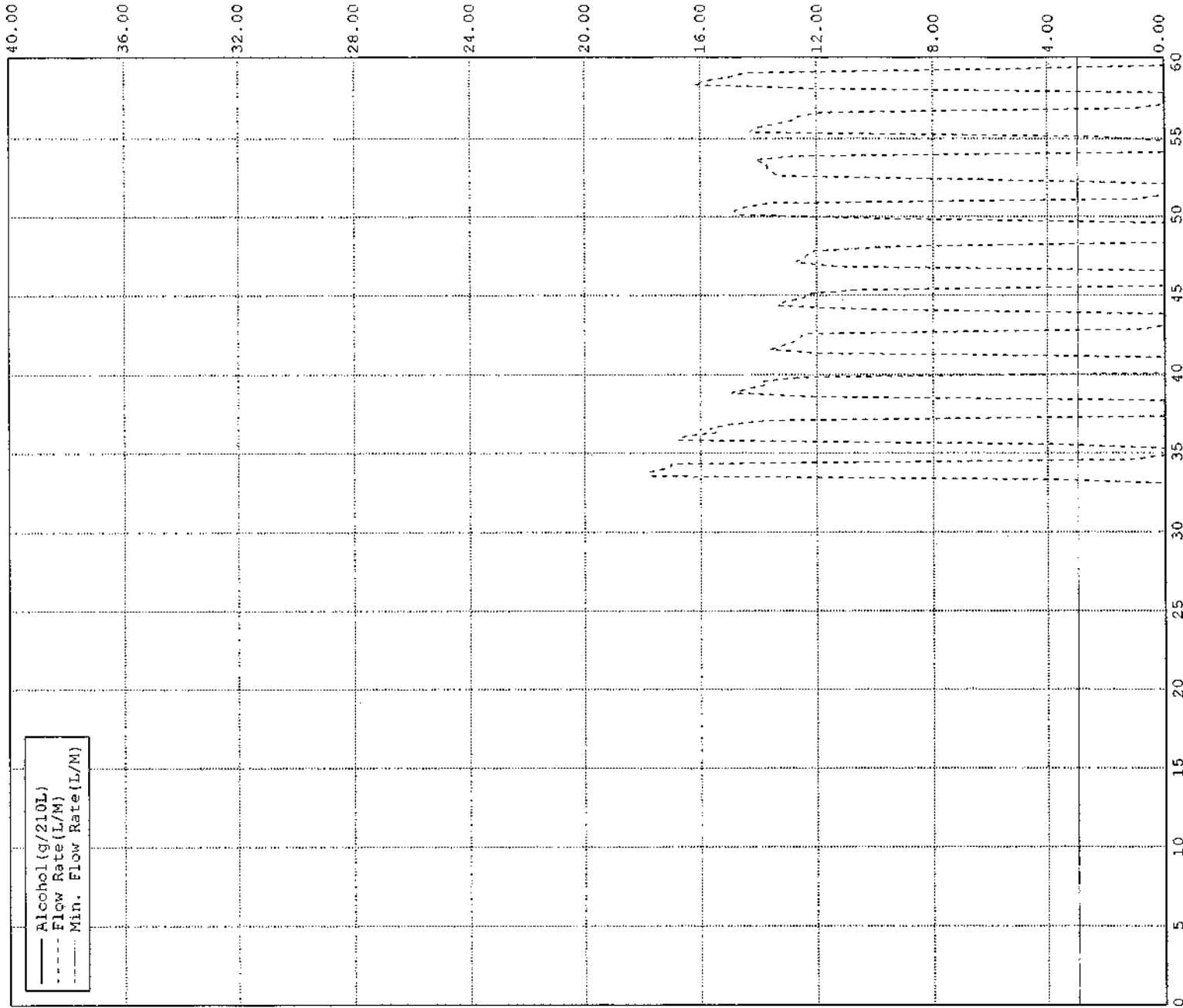
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 20-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.36: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:05  
BLANK TEST 0.000 13:05  
INTERNAL STANDARD VERIFIED 13:05  
EXTERNAL STANDARD 0.075 13:06  
BLANK TEST 0.000 13:07  
SUBJECT SAMPLE XXX 13:08

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

Date: 04/28/2020  
Time: 14:00:57

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

OPERATOR NAME:  
COLIEN S OBRyant  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1

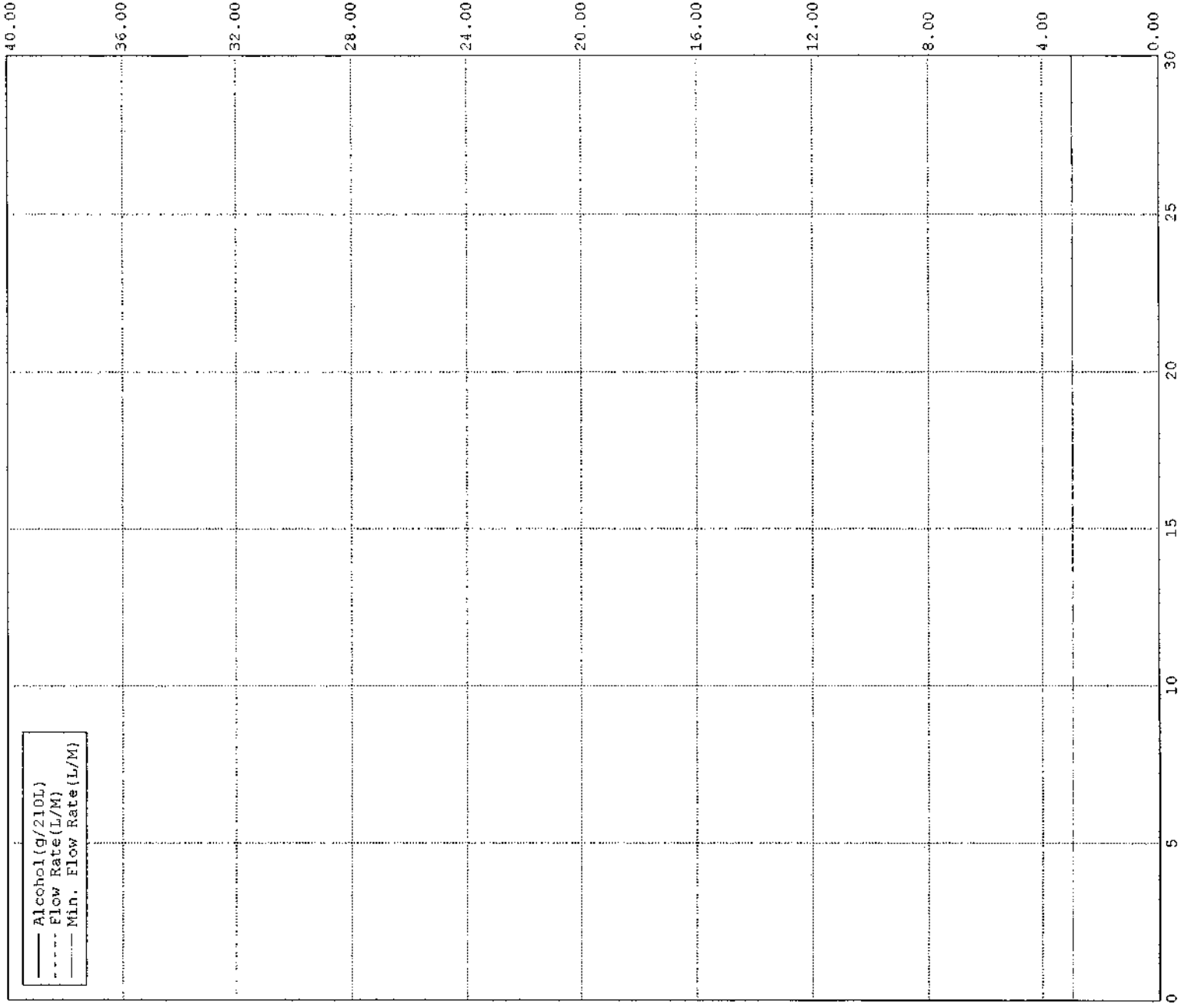
CASE/REPORT: 20-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.34: 0.078  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 14:02  
BLANK TEST 0.000 14:03  
INTERNAL STANDARD VERIFIED 14:03  
EXTERNAL STANDARD 0.075 14:03  
BLANK TEST 0.000 14:04

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100345

Date: 04/28/2020  
Time: 14:45:48

SUBJECT NAME:  
TEST TEST  
LICENSE #: NON DRINKING

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 20-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.34: 0.078  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:46
INTERNAL STANDARD	0.000	14:47
INTERNAL STANDARD	0.075	14:47
INTERNAL STANDARD	0.000	14:48
INTERNAL STANDARD	0.000	14:48
INTERNAL STANDARD	0.000	14:49
INTERNAL STANDARD	0.076	14:49
INTERNAL STANDARD	0.000	14:50

