

# 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 100350 Analyst Colleen O'Bryant Start Date 4/10/18

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 1.5 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

i. 0.020g/210L Mnf Aargas Lot AG616504 Exp 6/13/18

ii. 0.040g/210L Mnf Aargas Lot AG630101 Exp 10/27/18

iii. 0.080g/210L Mnf Aargas Lot AG634001 Exp 12/5/18

iv. 0.100g/210L Mnf Aargas Lot AG629304 Exp 10/19/18

v. 0.200g/210L Mnf guth Lot 17340 Exp 10/9/19

1. Simulator S/N DR5298 Date Calibrated 1/24/18

vi. 0.300g/210L Mnf guth Lot 17140 Exp 5/15/19

1. Simulator S/N SD1198 Date Calibrated 1/23/18

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf guth Lot 17280 Level 0.100 Exp 9/11/19

1. Simulator S/N SD1177 Date Calibrated 1/24/18

ii. Isopropanol - Mnf guth Lot 17280 Level 0.100 Exp 9/11/19

1. Simulator S/N SD1199 Date Calibrated 1/24/18

iii. Negative Control - Mnf guth Lot 17060 Level 0.100 Exp 2/14/19

1. Simulator S/N SD1088 Date Calibrated 1/24/18

e. RFI

6. Verify stylus is calibrated

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload

13. Remove tank prior to shut down

End Date 4/10/18

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100350  
-----

Date: 04/10/2018  
Time: 09:16:49

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 = 48.0°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.81 V PASSED  
(1.09 V - 2.53 V)  
Cooler Voltage = 1.87 V PASSED  
(1.12 V - 2.62 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 525 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.307 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 PASSED

Xq = 0.103 (0.43%) (0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100350  
-----

Date: 04/10/2018

Time: 9:22 AM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 46.9°C

Current Barometer 29.1 in

Volume (Ltr) 1.50

Settings

Lamp: 1.81 V

Bias: 80 V

Cooler: 2.00 V

Chopper: 524 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.050 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100350  
-----

Date: 04/04/2018  
Time: 10:33:02

OPERATOR NAME:  
BRANDI BARNETT  
CERTIFICATE #: 7038

Ca = 0.1000  
CAL = 0.961607    0.800 <= CAL < 1.200  
b1 = 0.0006    0.0000 <= b1 < 0.0040  
b2 = 0.0056    0.0010 <= b2 < 0.0100  
b3 = 0.0009    0.0000 <= b3 < 0.0040  
Xq = 0.1028    0.0500 <= Xq < 0.2000  
a21 = 1.148061    1.050 <= a21 < 1.300  
a31 = 0.485456    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100350

Date: 04/10/2018  
Time: 09:26:41

SUBJECT NAME:  
TEST TEST  
LICENSE #: VOLUME TEST

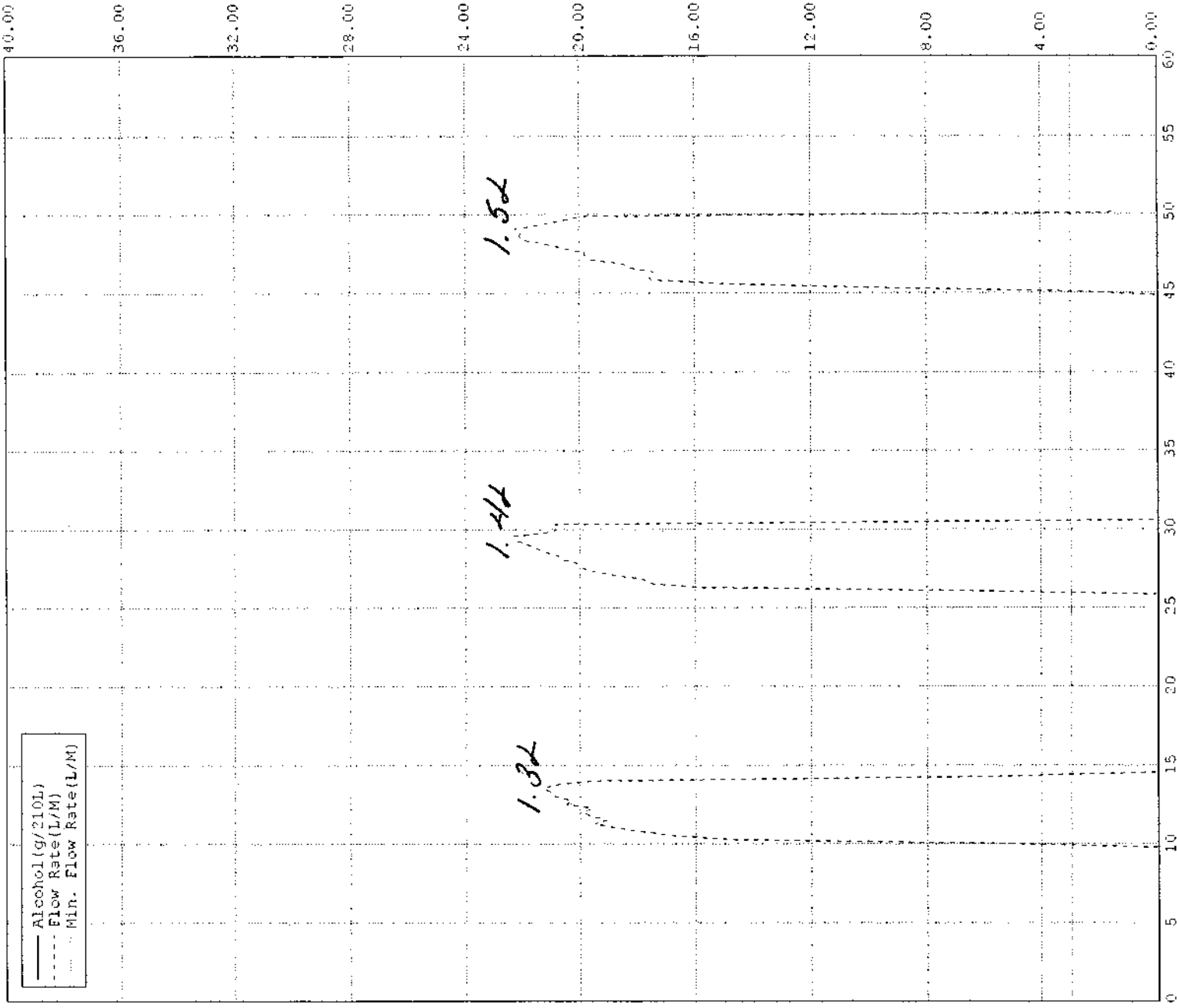
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 18-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.10: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:27
BLANK TEST	0.000	09:28
INTERNAL STANDARD	VERIFIED	09:28
EXTERNAL STANDARD	0.076	09:28
BLANK TEST	0.000	09:29
SUBJECT SAMPLE (Vol=1.52L)	0.000	09:30
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.076	09:31
BLANK TEST	0.000	09:32

*COB*



LINEARITY CHECK

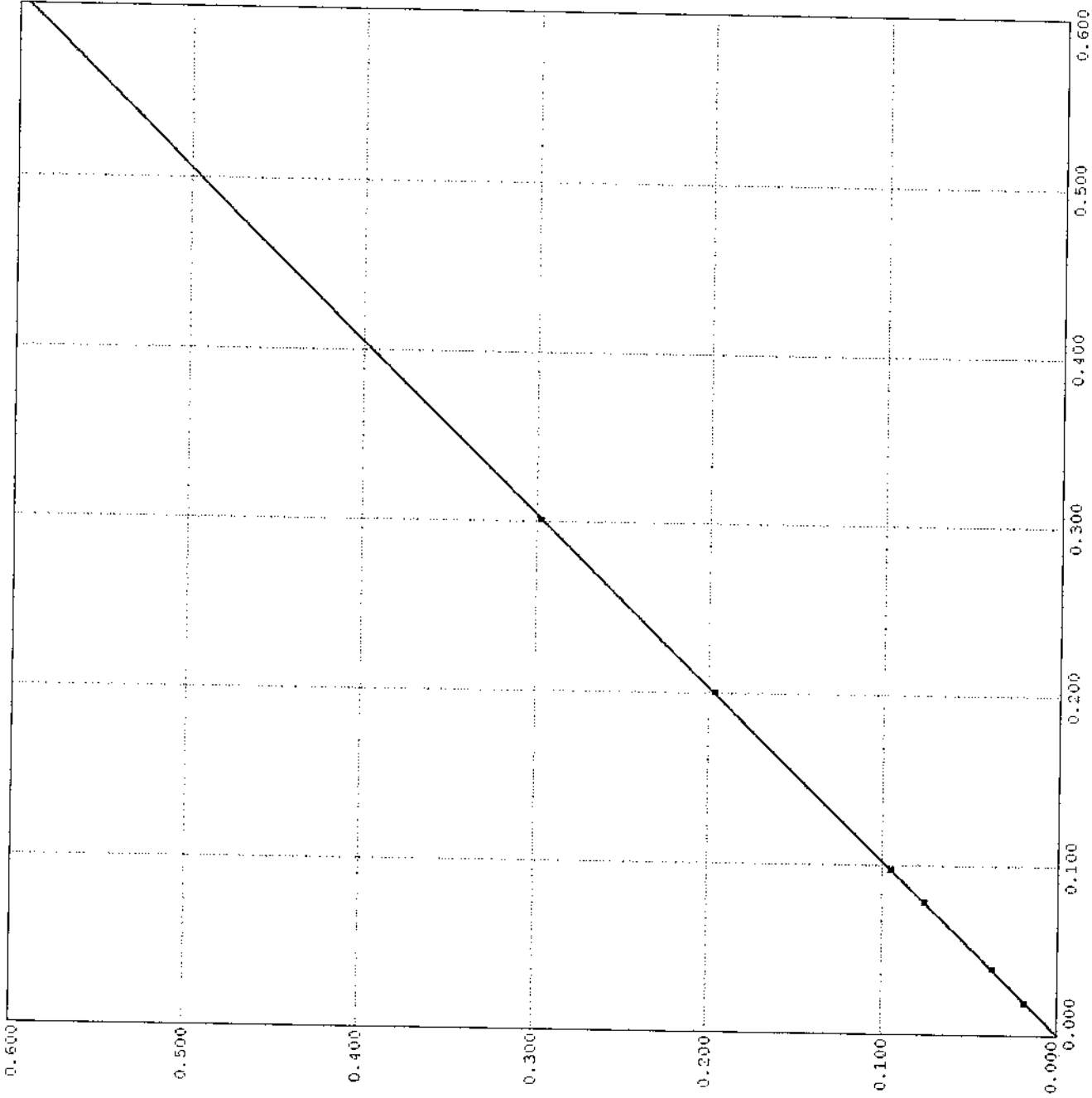
Alaska Department of Public Safety  
DATAMASTER dmt: 100350

Date: 04/10/2018  
Time: 09:35:28

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

TARGET	AVERAGE	STD. DEV.
0.019	0.0196	0.0005
0.039	0.0380	0.0000
0.078	0.0768	0.0004
0.097	0.0960	0.0000
0.200	0.1972	0.0004
0.300	0.2980	0.0019

SLOPE = 0.991800  
R<sup>2</sup> = 0.999954



CAB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100350

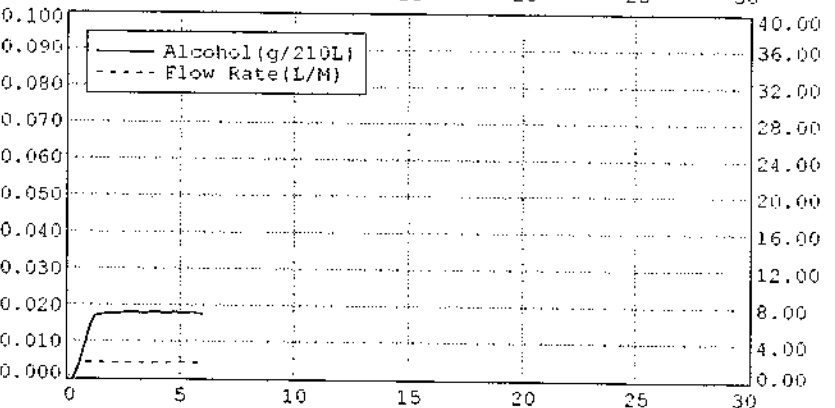
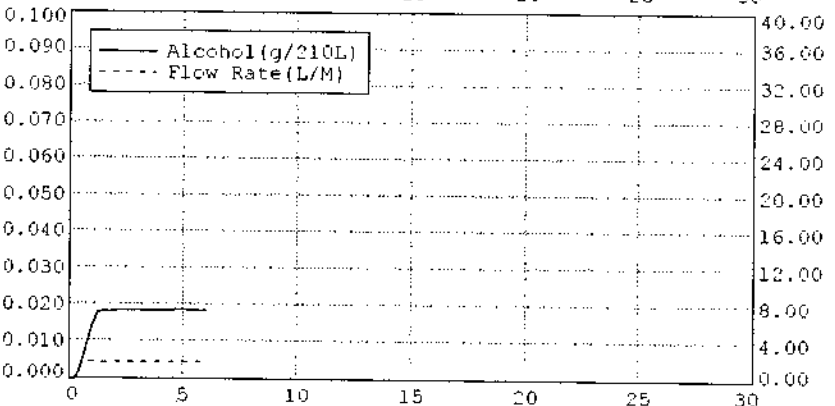
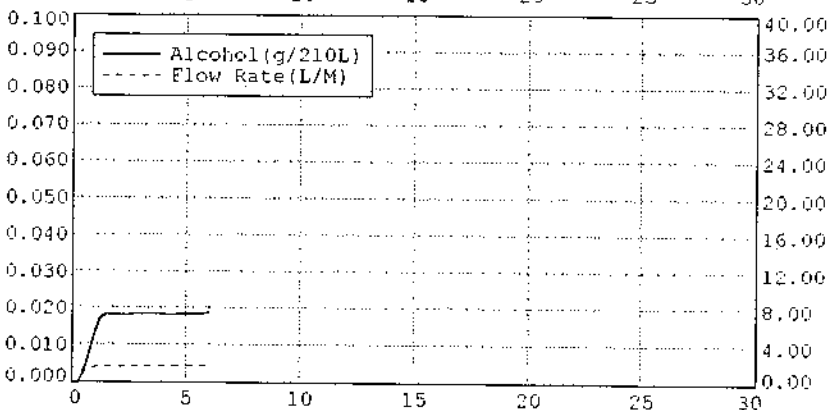
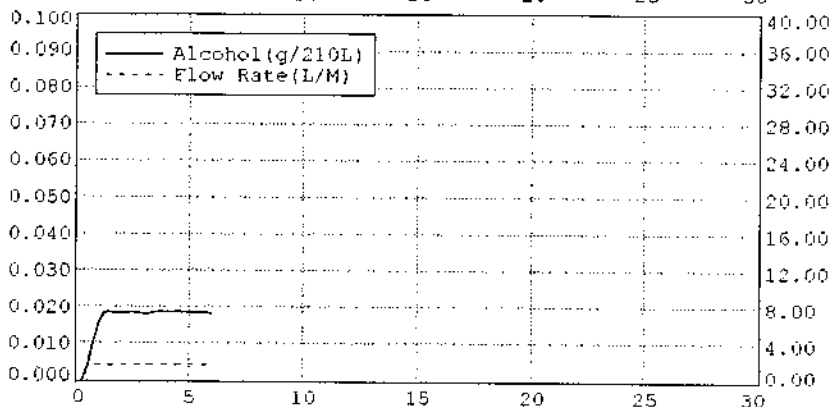
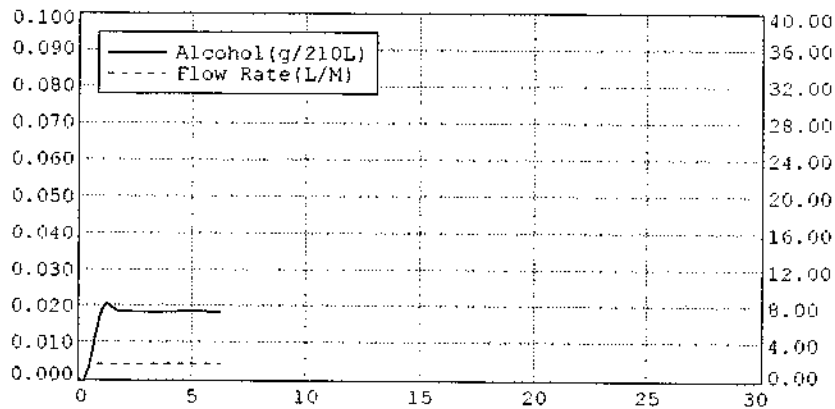
Date: 04/10/2018  
 Time: 09:36:48

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.10: 0.019  
 LOT #: AG616504  
 EXPIRATION: 06/13/2018  
 TANK PRESSURE: 1057 psi

BLANK TEST	0.000	09:37
INTERNAL STANDARD	VERIFIED	09:37
EXTERNAL STANDARD	0.020	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.019	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.020	09:40
BLANK TEST	0.000	09:41
EXTERNAL STANDARD	0.020	09:41
BLANK TEST	0.000	09:42
EXTERNAL STANDARD	0.019	09:42
BLANK TEST	0.000	09:43

Average = 0.0196  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100350

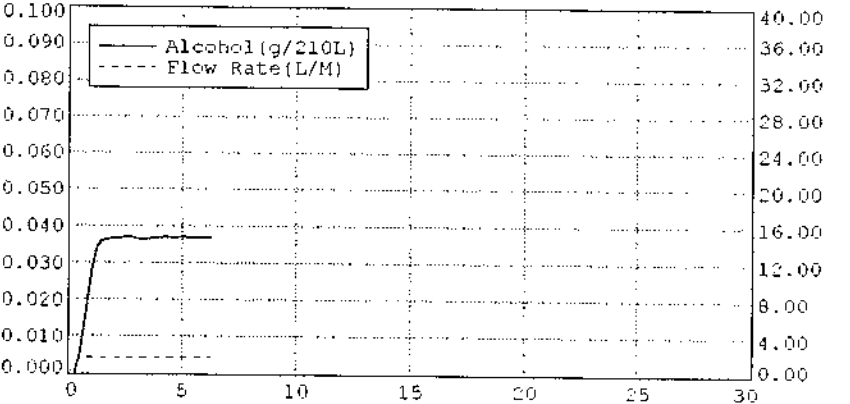
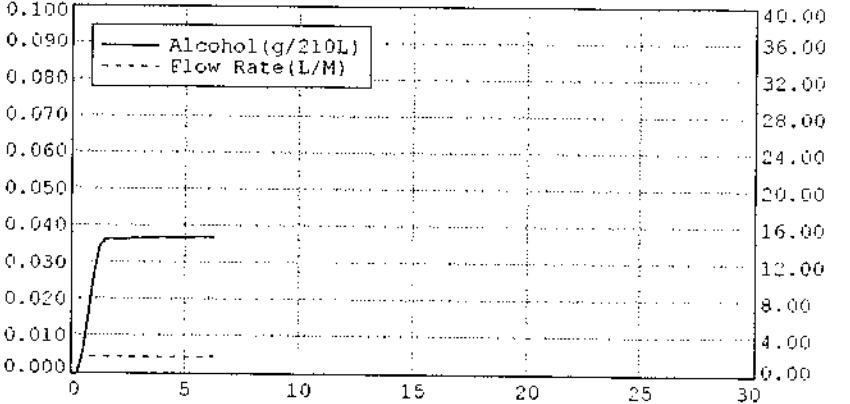
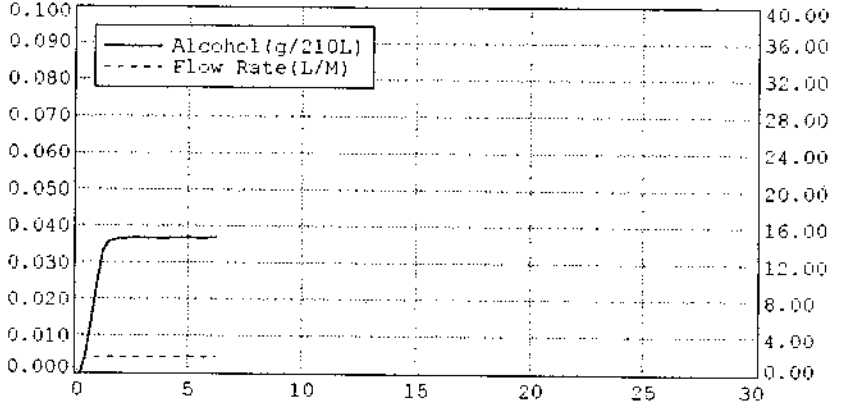
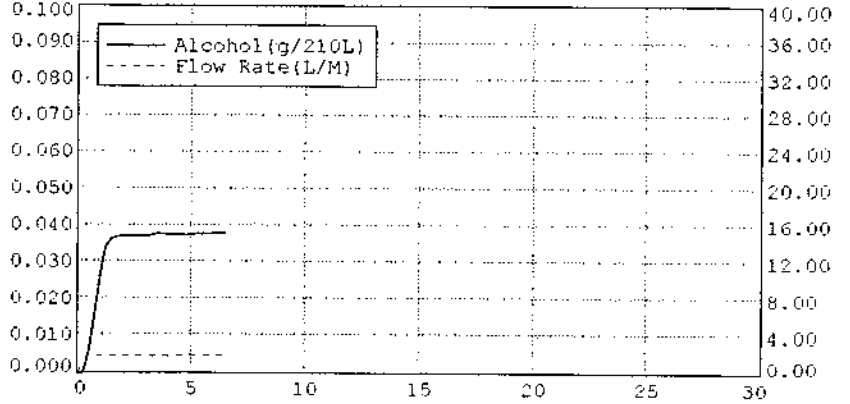
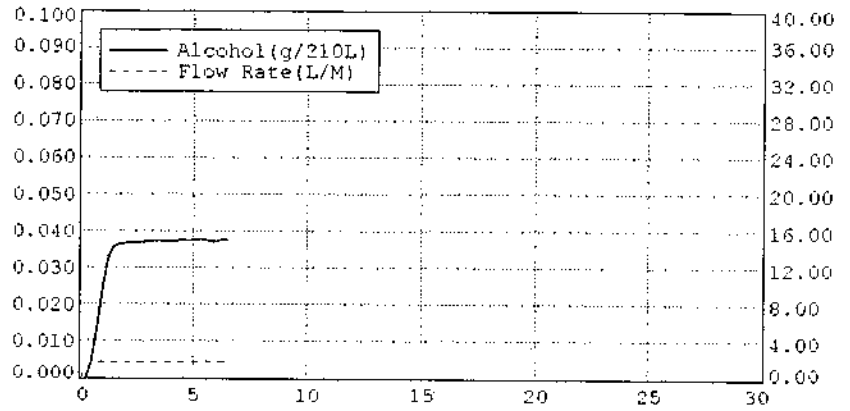
Date: 04/10/2018  
 Time: 09:46:35

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.09: 0.039  
 LOT #: AG630101  
 EXPIRATION: 10/27/2018  
 TANK PRESSURE: 1059 psi

BLANK TEST	0.000	09:47
INTERNAL STANDARD	VERIFIED	09:47
EXTERNAL STANDARD	0.038	09:48
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.038	09:49
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.038	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.038	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.038	09:52
BLANK TEST	0.000	09:53

Average = 0.0380  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100350

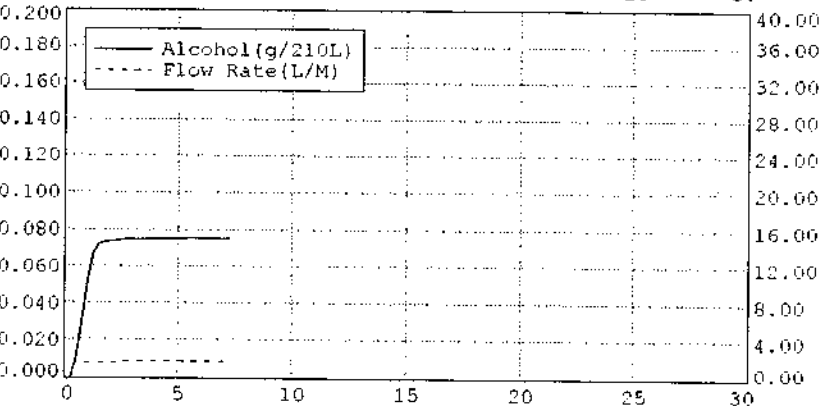
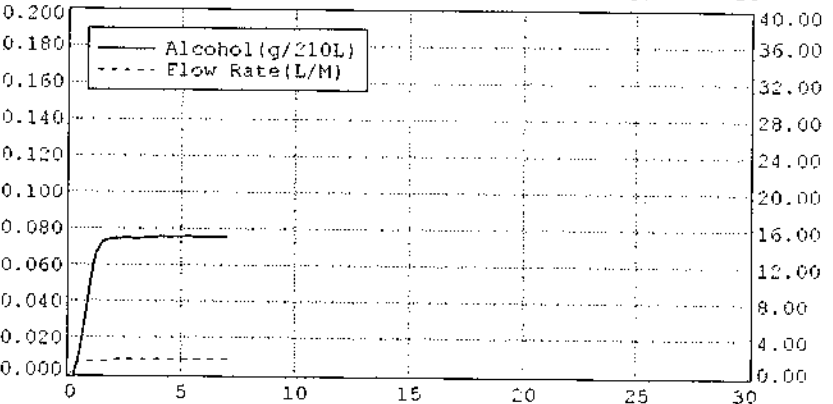
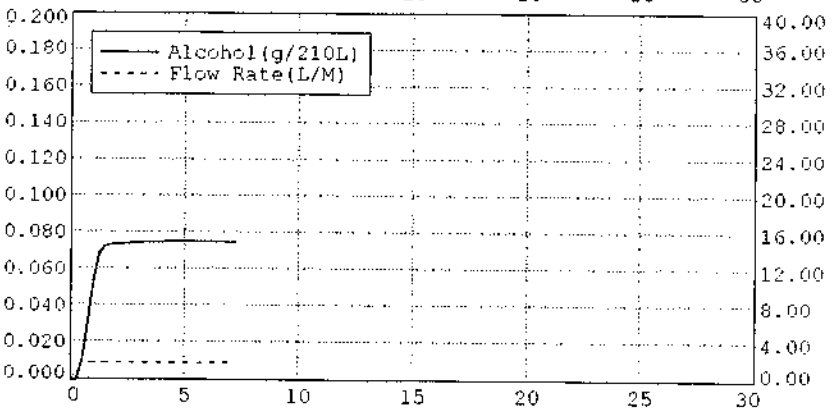
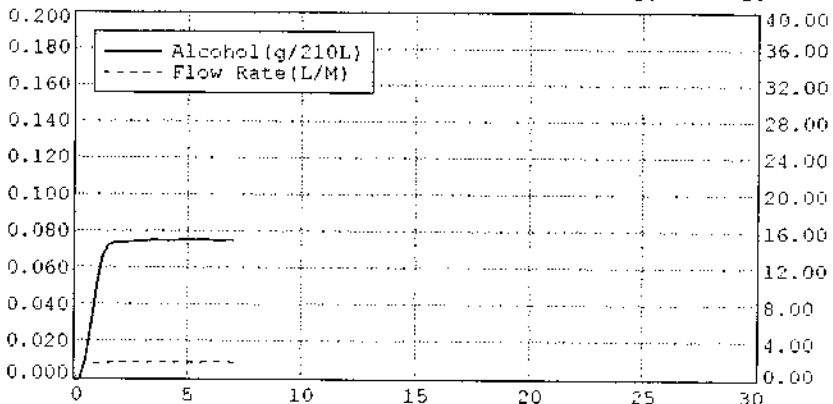
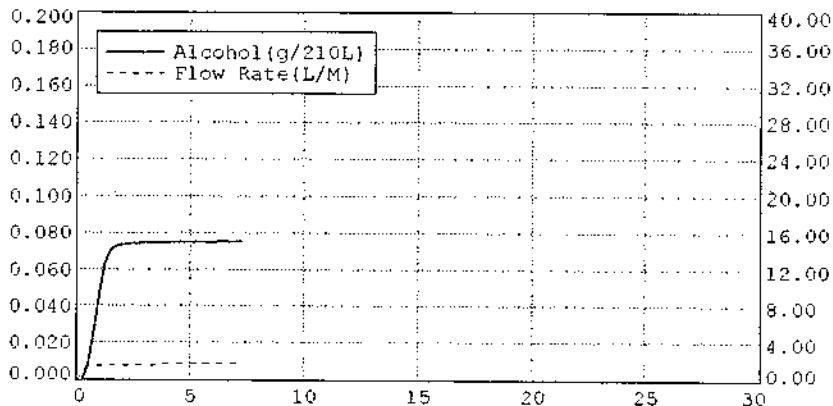
Date: 04/10/2018  
 Time: 10:00:03

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.09: 0.078  
 LOT #: AG634001  
 EXPIRATION: 12/05/2018  
 TANK PRESSURE: 1055 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:01
EXTERNAL STANDARD	0.077	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.077	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.076	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.077	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.077	10:06
BLANK TEST	0.000	10:07

Average = 0.0768  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100350

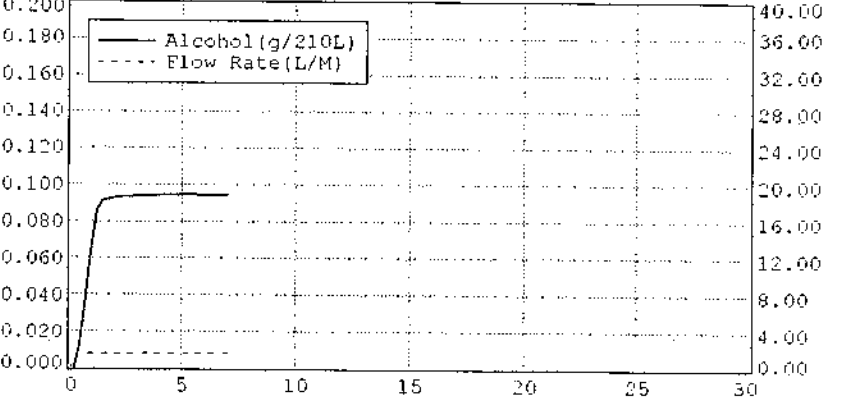
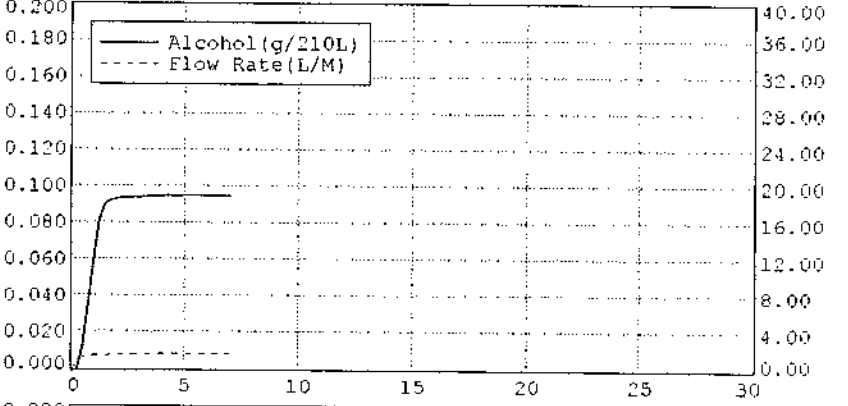
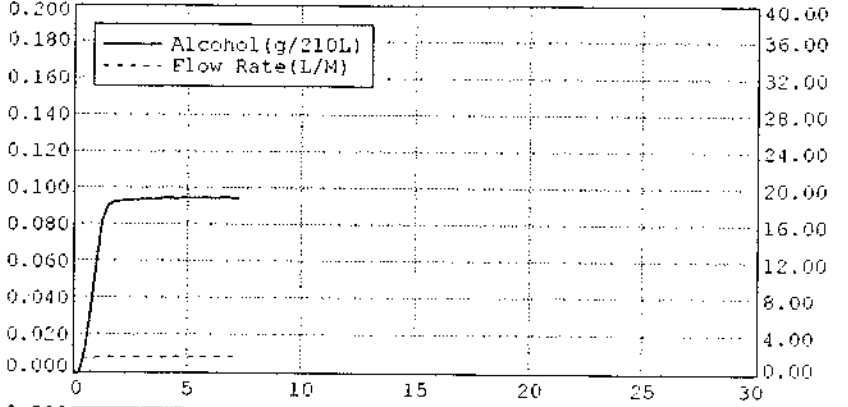
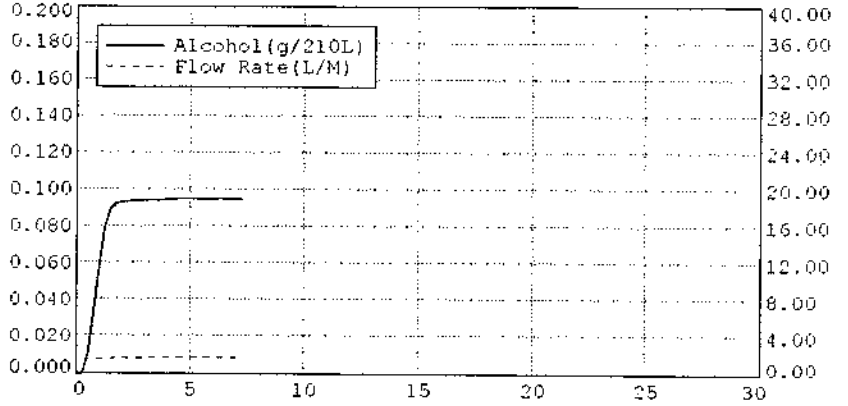
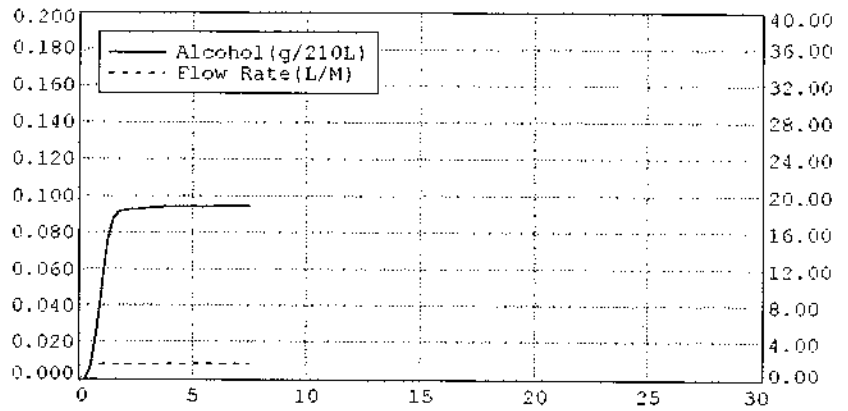
Date: 04/10/2018  
 Time: 10:14:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.09: 0.097  
 LOT #: AG629304  
 EXPIRATION: 10/19/2018  
 TANK PRESSURE: 639 psi

BLANK TEST	0.000	10:15
INTERNAL STANDARD	VERIFIED	10:16
EXTERNAL STANDARD	0.096	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.096	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.096	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.096	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.096	10:20
BLANK TEST	0.000	10:21

Average = 0.0960  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

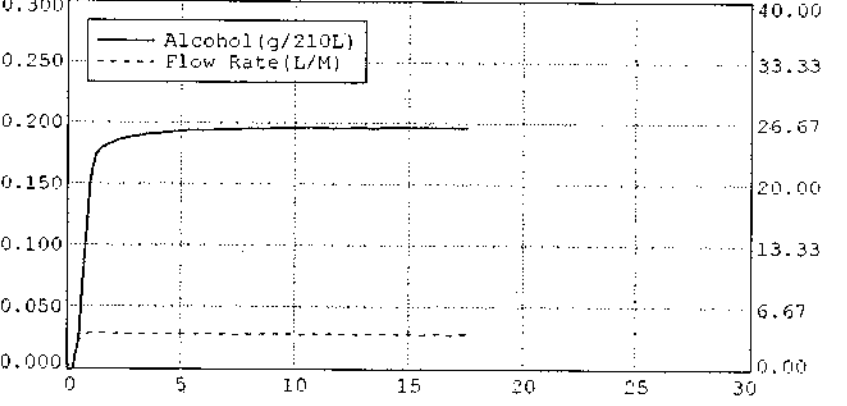
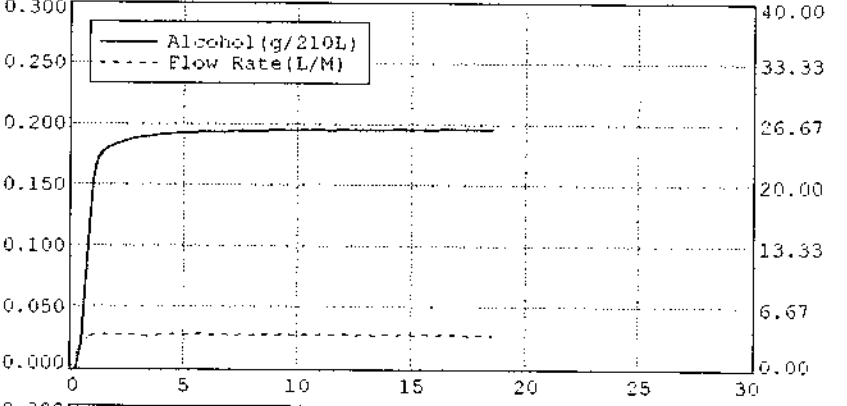
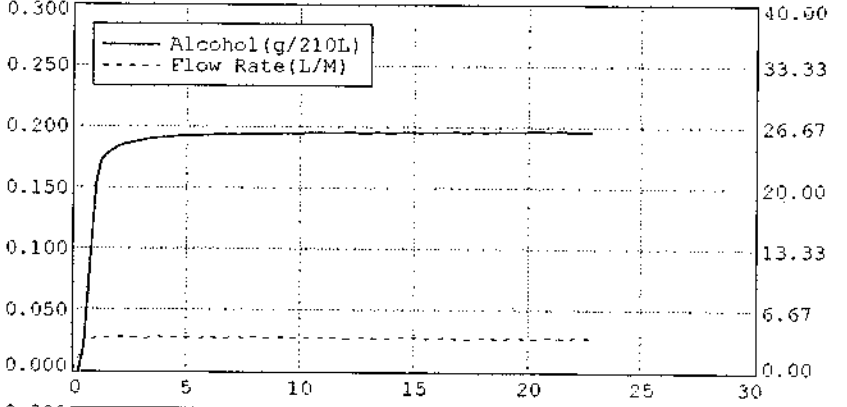
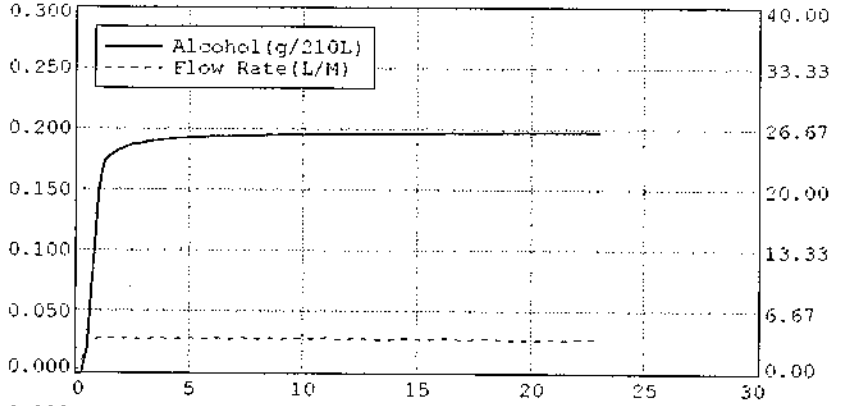
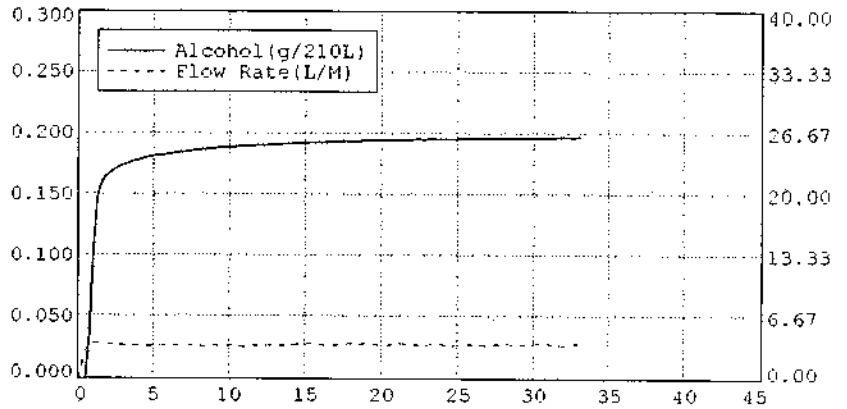
Alaska Department of Public Safety  
 DATAMASTER dmt: 100350

Date: 04/10/2018  
 Time: 13:43:55

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.200  
 LOT #: 17340  
 EXPIRATION: 10/09/2019

BLANK TEST	0.000	13:44
INTERNAL STANDARD	VERIFIED	13:45
EXTERNAL STANDARD	0.197	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.198	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.197	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.197	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.197	13:51
BLANK TEST	0.000	13:52

Average = 0.1972  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100350

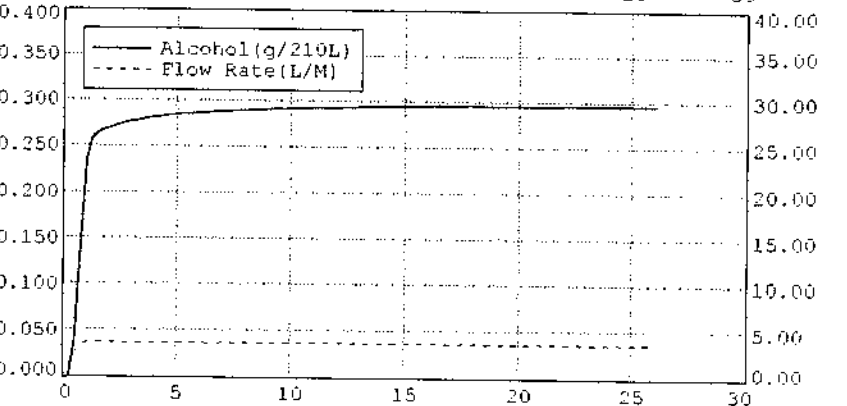
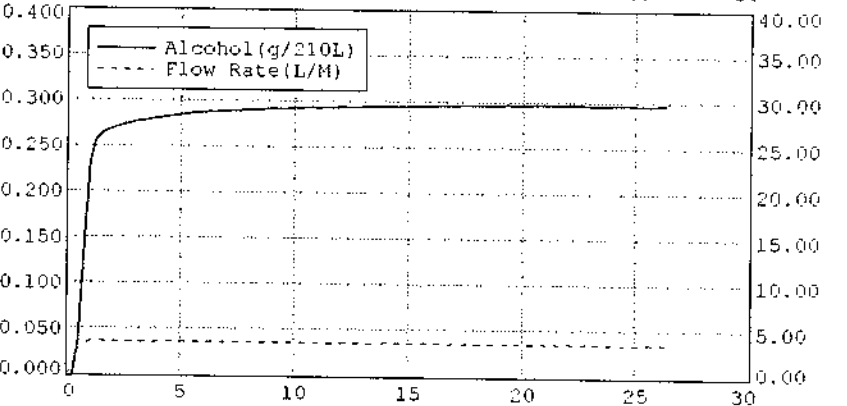
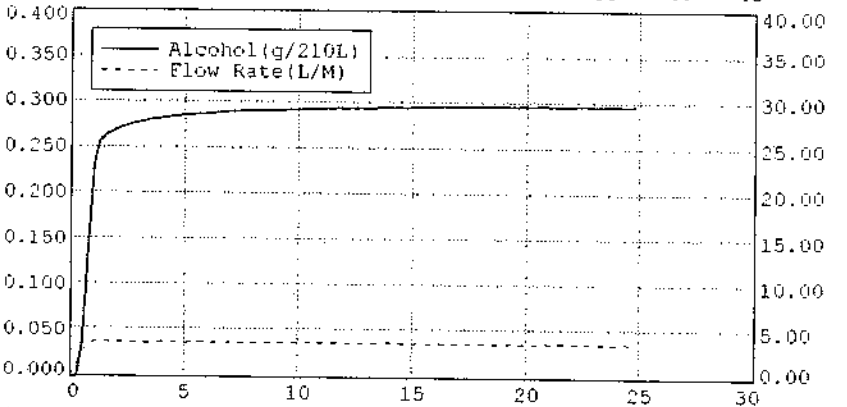
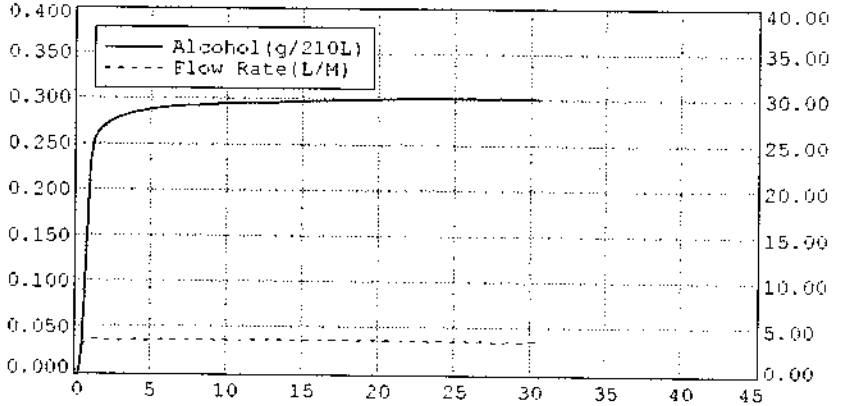
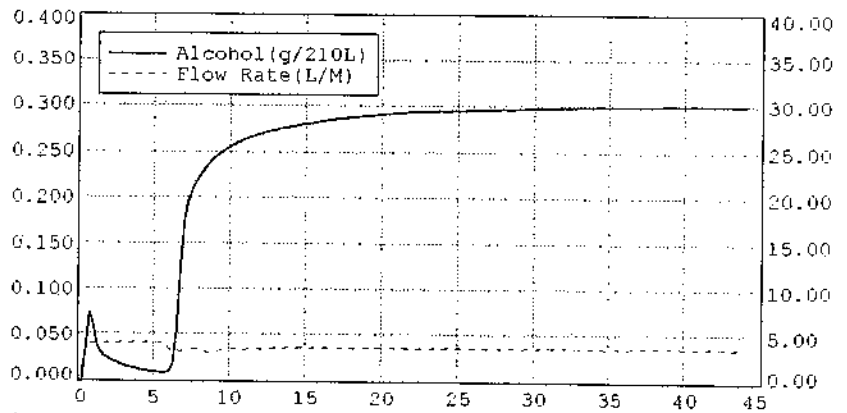
Date: 04/10/2018  
 Time: 14:00:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 LOT #: 17140  
 EXPIRATION: 05/15/2019

BLANK TEST	0.000	14:01
INTERNAL STANDARD	VERIFIED	14:01
EXTERNAL STANDARD	0.300	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.300	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.296	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.297	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.297	14:08
BLANK TEST	0.000	14:09

Average = 0.2980  
 Std Dev = 0.0019



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dnt: 100350

Date: 04/10/2018  
Time: 14:13:55

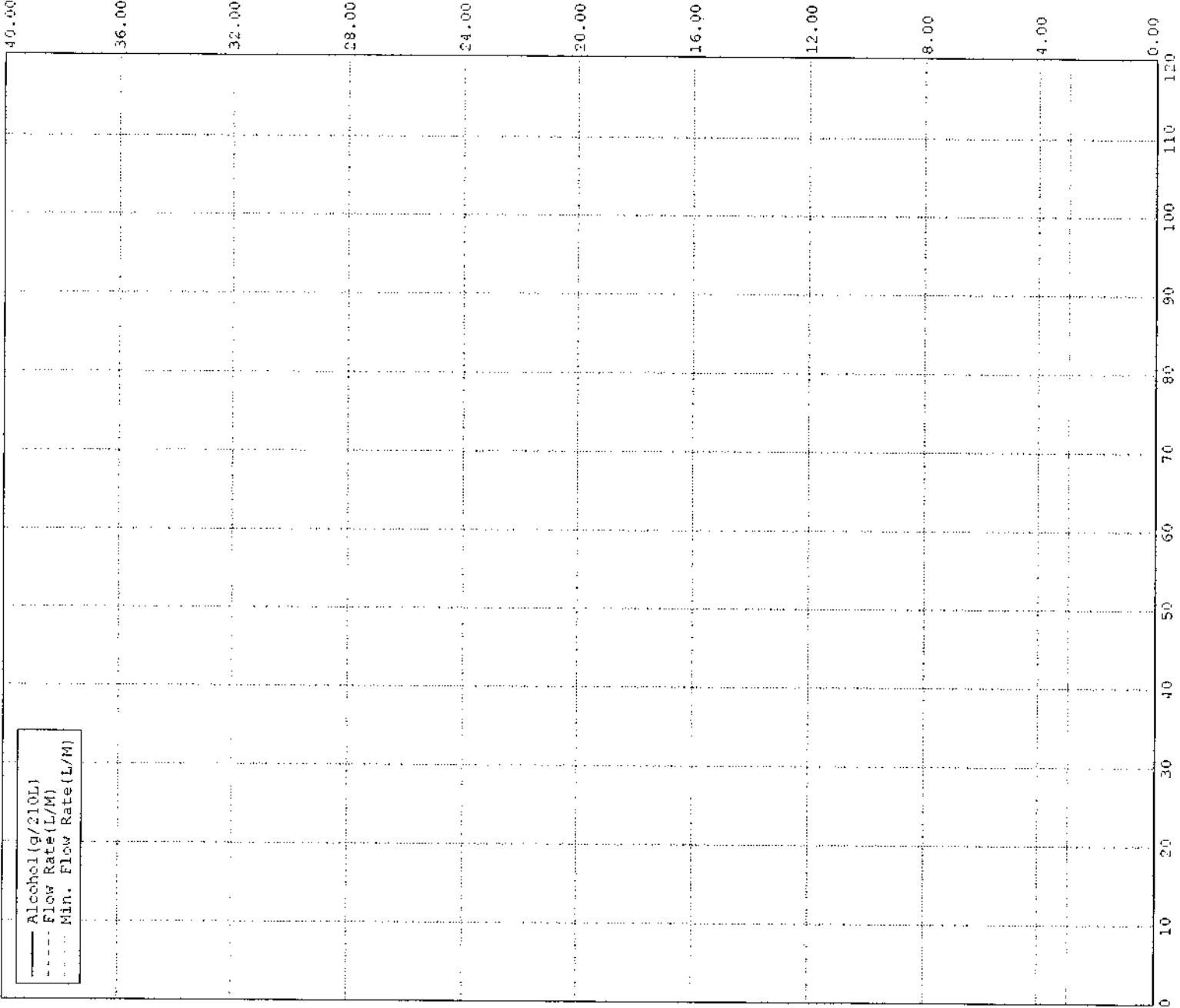
SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

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

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 18-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.02: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:44  
BLANK TEST 0.000 14:44  
INTERNAL STANDARD VERIFIED 14:44  
EXTERNAL STANDARD 0.076 14:44  
BLANK TEST 0.000 14:45  
SUBJECT SAMPLE INCOMPLETE 14:47



SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100350

Date: 04/10/2018  
Time: 14:50:36

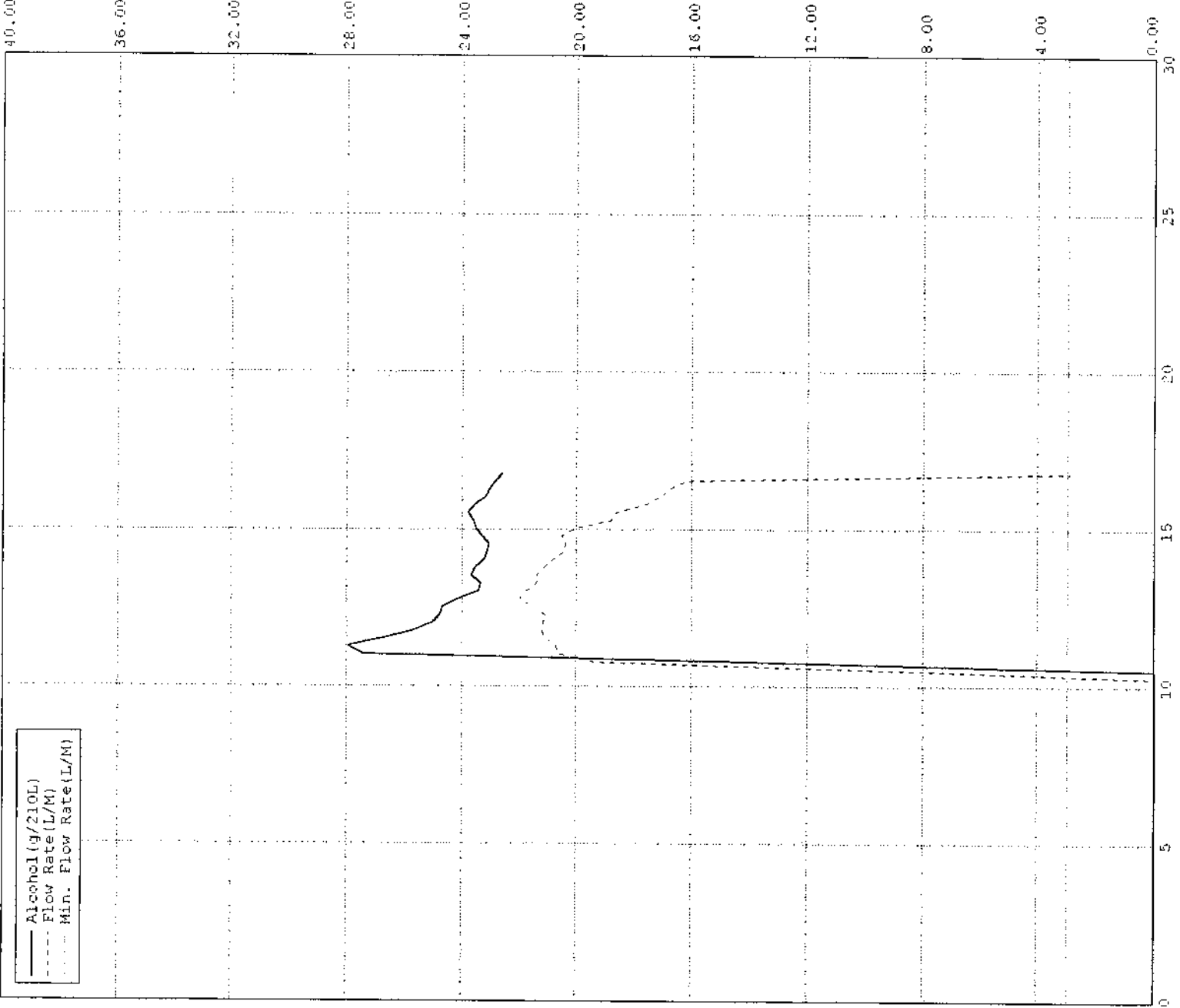
SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

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

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 18-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK  
BLANK TEST 0.000 PASSED 14:53  
INTERNAL STANDARD 0.076 VERIFIED 14:53  
EXTERNAL STANDARD 0.000 14:54  
BLANK TEST 0.000 14:55  
SUBJECT SAMPLE INVALID 14:55



SUBJECT TEST

Alaska Department of Public Safety  
DAMMASTER dmt: I00350

Date: 04/10/2018  
Time: 15:01:03

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:  
AAA1

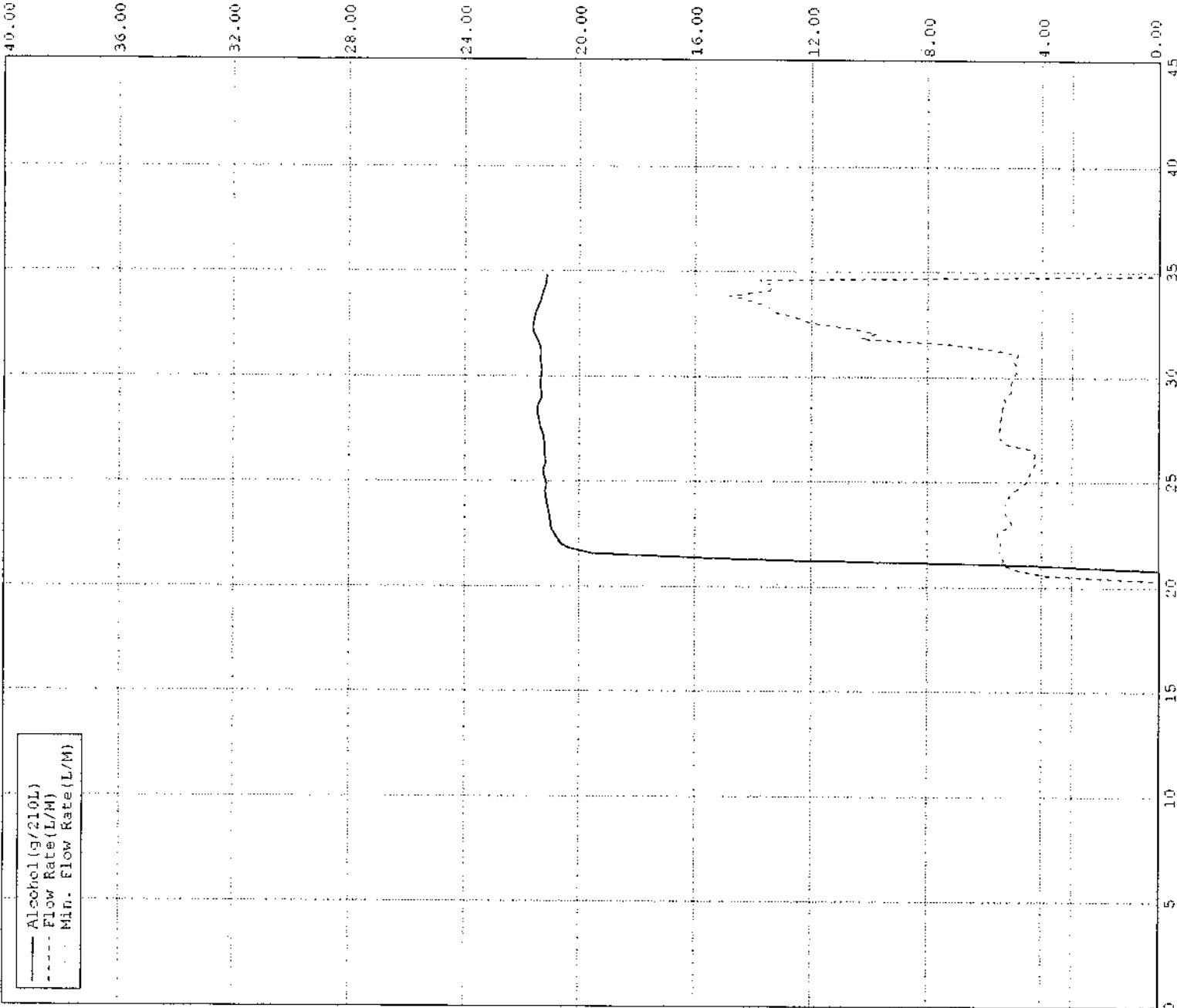
CASE/REPORT: 18-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	15:03
BLANK TEST	0.000	15:03
INTERNAL STANDARD	VERIFIED	15:03
Xq = 0.105 (2.14%)		
EXTERNAL STANDARD	0.077	15:03
X[1] = 0.0769 (0.0003) (0.0042)		
BLANK TEST	0.000	15:04
SUBJECT SAMPLE	XXX	15:05
X[1] = 0.1082 (-0.0144) (0.0041)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100350

Date: 04/10/2018  
Time: 15:10:24

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

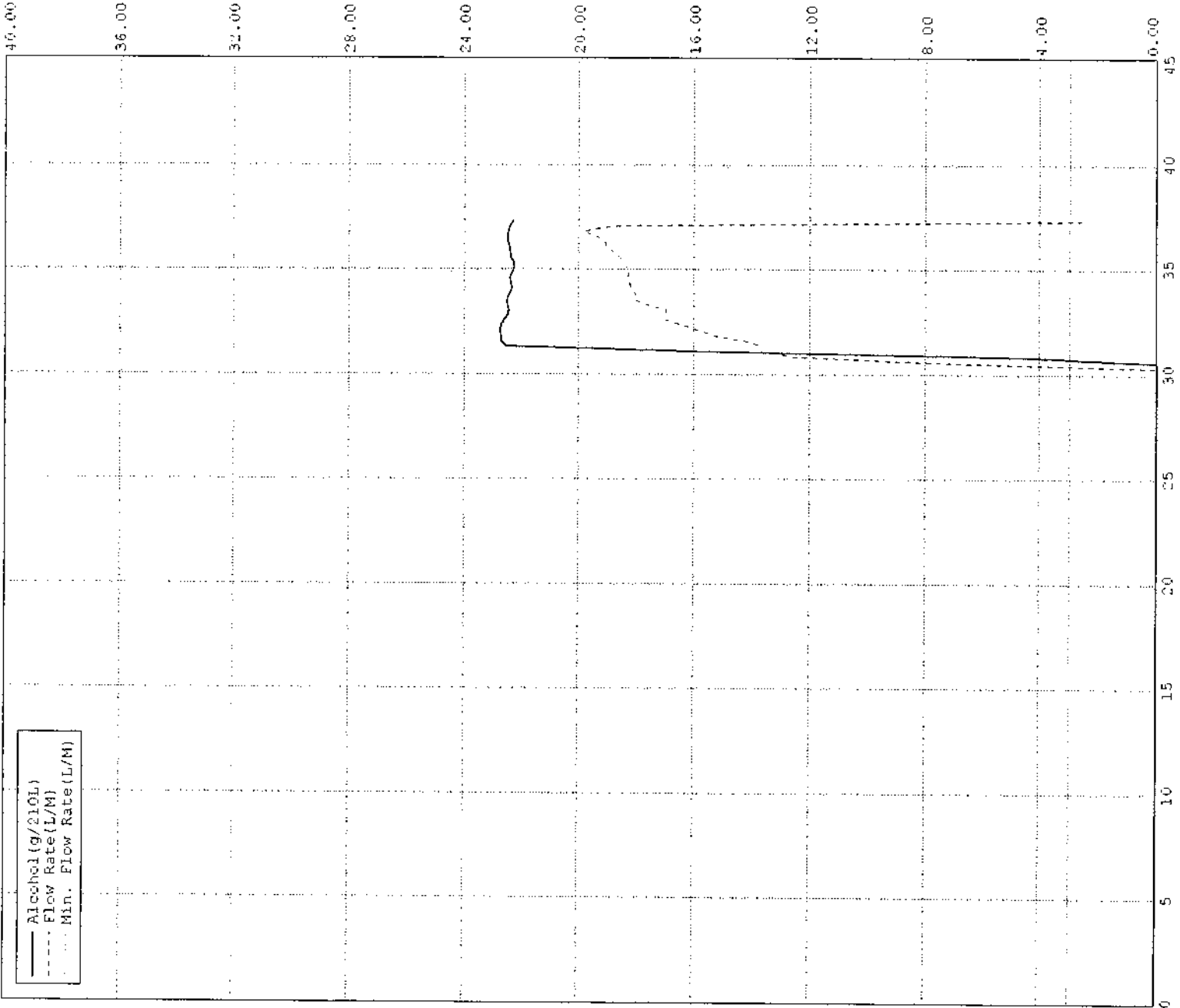
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 18-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOF #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	15:11
BLANK TEST	0.000	15:11
INTERNAL STANDARD	VERIFIED	15:11
Xq = 0.106 (2.91%)		
EXTERNAL STANDARD	0.074	15:11
X[1] = 0.0745 (-0.0018) (0.0034)		
BLANK TEST	0.000	15:12
SUBJECT SAMPLE	XXX	15:13
X[1] = 0.1145 (-0.0165) (0.0051)		

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100350

Date: 04/10/2018  
Time: 15:17:12

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 18-1234  
TEST TYPE: TEST

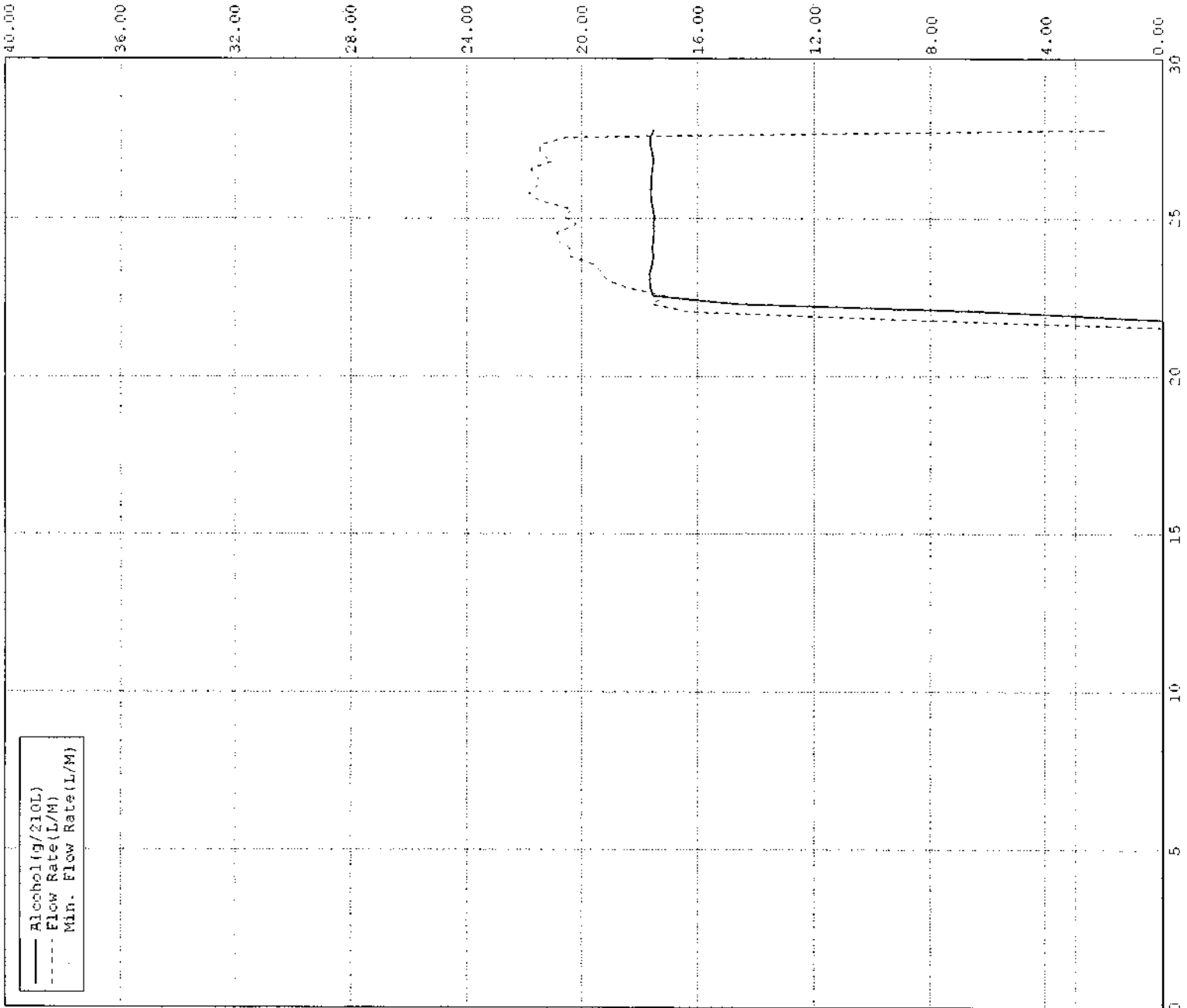
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	15:18
BLANK TEST	0.000	15:18
INTERNAL STANDARD	VERIFIED	15:18
Xq = 0.105 (2.57%)		
EXTERNAL STANDARD	0.076	15:18
X[1] = 0.0764 (0.0002)	(0.0042)	
BLANK TEST	0.000	15:19
SUBJECT SAMPLE (Vol=1.97L)	0.090	15:20
X[1] = 0.0903 (0.0012)	(0.0034)	
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.075	15:21
X[1] = 0.0754 (-0.0012)	(0.0033)	
BLANK TEST	0.000	15:22

Filter 2 avg = - 0.0006

Filter 3 avg = 0.0038



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100350

Date: 04/10/2018  
Time: 15:26:04

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

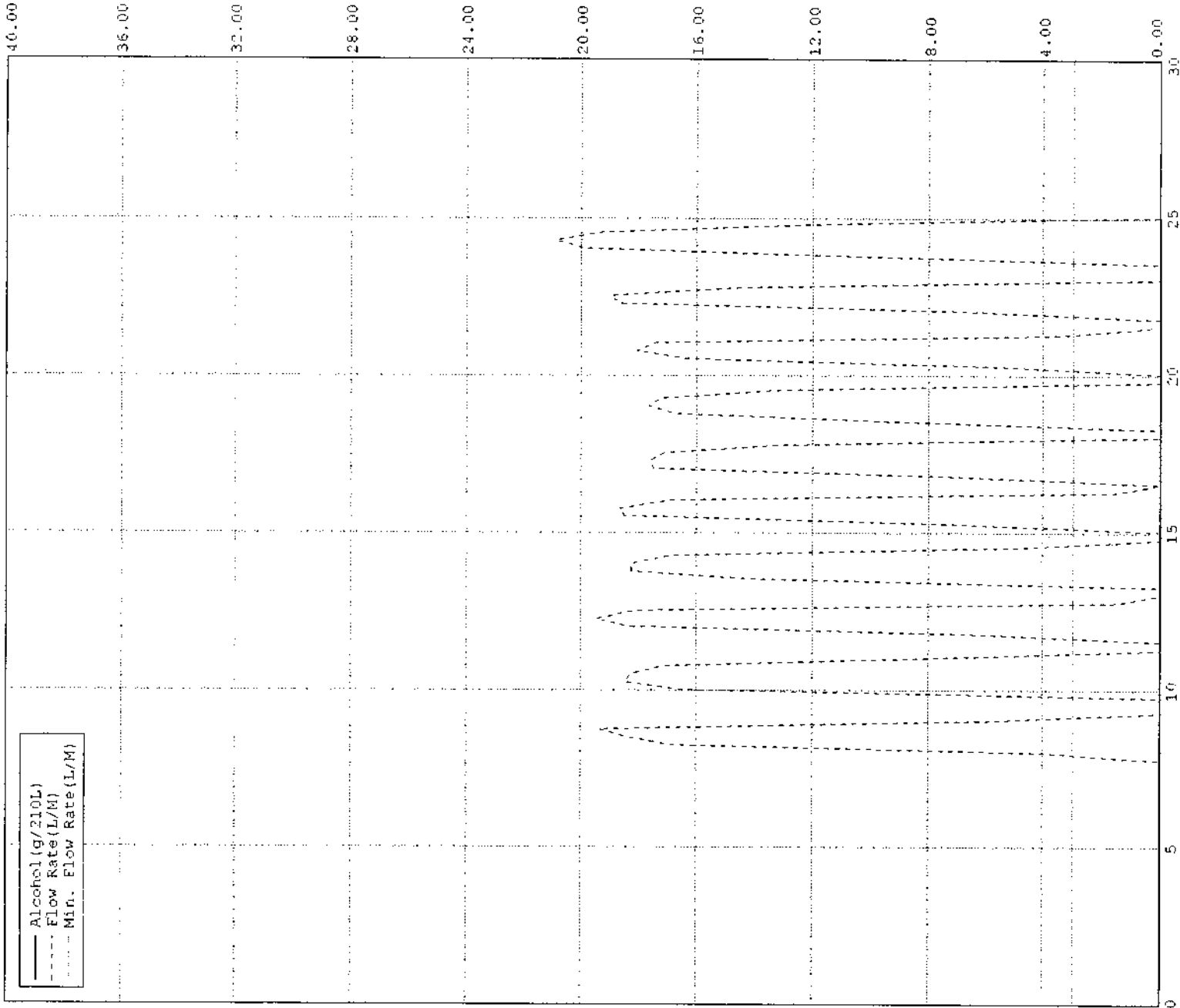
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 18-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 15:27  
BLANK TEST 0.000 15:27  
INTERNAL STANDARD VERIFIED 15:27  
EXTERNAL STANDARD 0.076 15:27  
BLANK TEST 0.000 15:28  
SUBJECT SAMPLE XXX 15:29

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100350

Date: 04/10/2018  
Time: 15:31:41

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

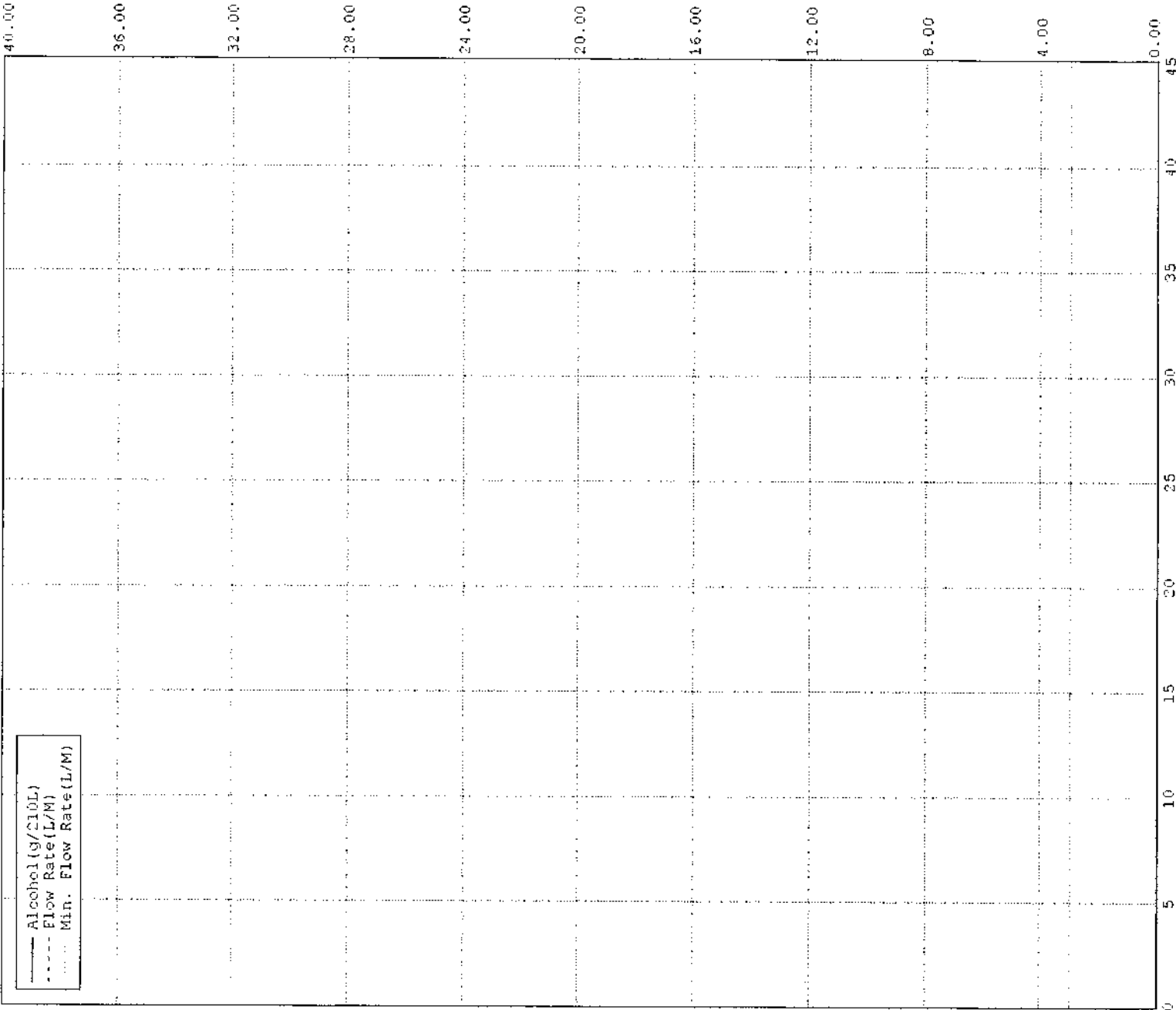
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 18-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 15:38  
BLANK TEST 0.000 15:38  
INTERNAL STANDARD VERIFIED 15:38  
EXTERNAL STANDARD 0.077 15:38  
BLANK TEST 0.000 15:39

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100350

Date: 04/10/2018  
Time: 15:50:59

SUBJECT NAME:  
TEST TEST  
LICENSE #: NON-DRINKING

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

DEPT/AGENCY:  
AAA1

CASE/REPORT: 18-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	15:51
BLANK TEST	0.000	15:52
INTERNAL STANDARD	VERIFIED	15:52
EXTERNAL STANDARD	0.077	15:52
BLANK TEST	0.000	15:53
SUBJECT SAMPLE (Vol=1.70L)	0.000	15:53
BLANK TEST	0.000	15:54
EXTERNAL STANDARD	0.077	15:54
BLANK TEST	0.000	15:55

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

