

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 100700 Analyst C.O. Bryant Start Date 10/12/17

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 Argon Lot AG616304 Exp 06/13/18

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

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

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

v. 0.200g/210L Mnf Guth Lot 17090 Exp 2/24/19

1. Simulator S/N SD 1200 Date Calibrated 3/29/17

vi. 0.300g/210L Mnf Guth Lot 16410 Exp 12/19/18

1. Simulator S/N DR 4162 Date Calibrated 3/27/17

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18

1. Simulator S/N DR 4178 Date Calibrated 3/27/17

ii. Isopropanol - Mnf Guth Lot 17060 Level 0.100 Exp 2/14/19

1. Simulator S/N DR 1176 Date Calibrated 3/29/17

iii. Negative Control - Mnf Guth Lot 17280 Level 0.100 Exp 9/11/19

1. Simulator S/N DR 4176 Date Calibrated 3/28/17

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 10/17/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/12/2017
Time: 07:13:02

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 = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.73 V PASSED
(1.02 V - 2.38 V)
Cooler Voltage = 1.61 V PASSED
(0.98 V - 2.28 V)
Bias Voltage = 79 V PASSED
(49 V - 115 V)
Chopper Freq = 552 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 5.397 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 = 0.080 0.97% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100700

Date: 10/12/2017
Time: 1:28 PM

Temperatures (°C)
Sample Cell: 49.4°C
Breath Tube: 48.0°C

Current Barometer 29.8 in
Volume (Ltr) 1.46

Settings
Lamp: 1.73 V
Bias: 80 V
Cooler: 1.71 V
Chopper: 552 Hz

Voltages (V)
Flow: 1.07 V
Detector: -0.014 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 11/02/2011
Time: 08:45:04

Ca = 0.1000
CAL = 0.979351 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0040 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0805 0.0500 <= Xq < 0.2000
a21 = 1.149740 1.050 <= a21 < 1.300
a31 = 0.537738 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/12/2017
Time: 13:40:52

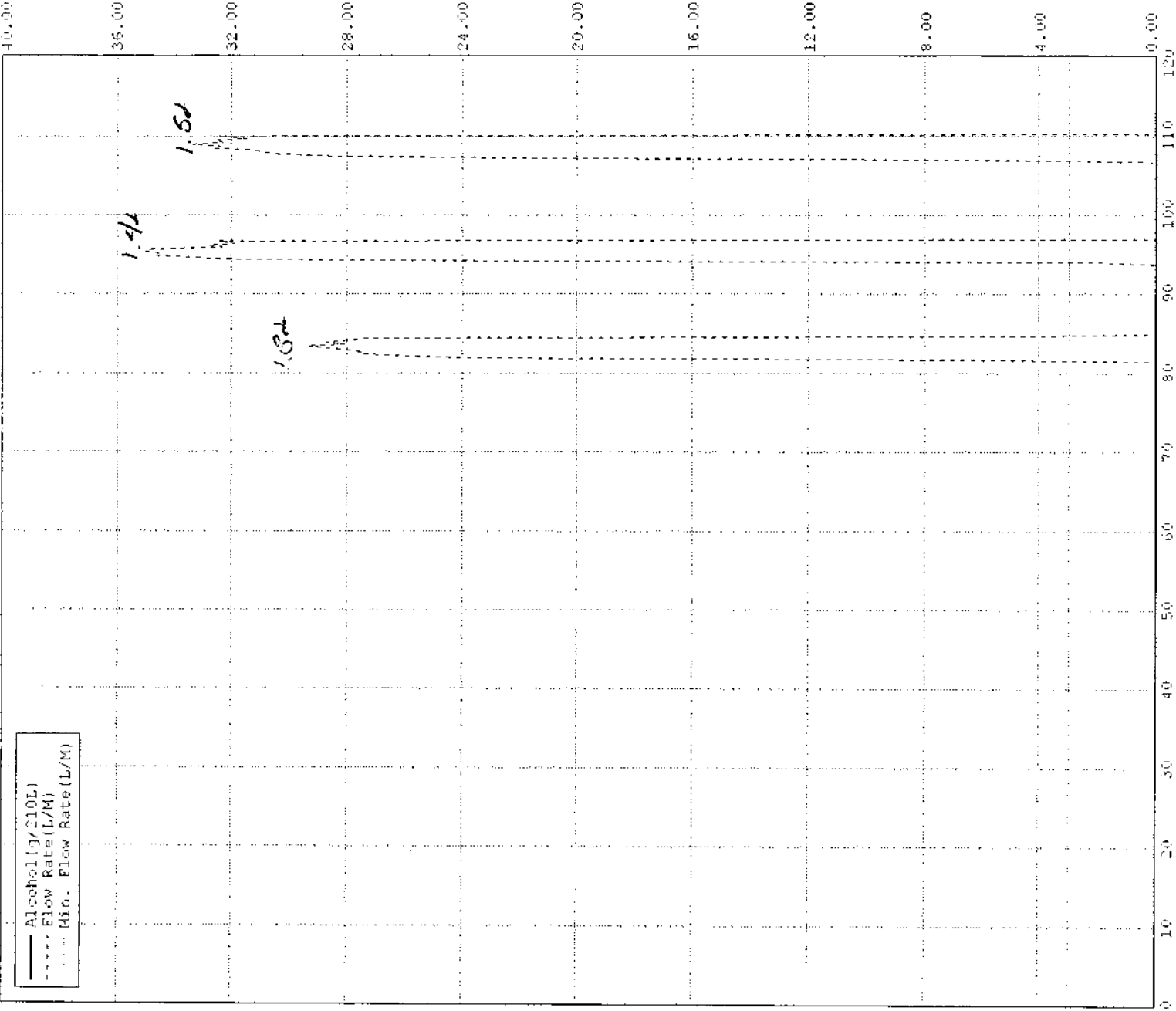
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:42
BLANK TEST 0.000 13:42
INTERNAL STANDARD VERIFIED 13:42
EXTERNAL STANDARD 0.079 13:42
BLANK TEST 0.000 13:43
SUBJECT SAMPLE (Vol=1.56L) 0.000 13:45
BLANK TEST 0.000 13:46
EXTERNAL STANDARD 0.079 13:46
BLANK TEST 0.000 13:47



LINEARITY CHECK

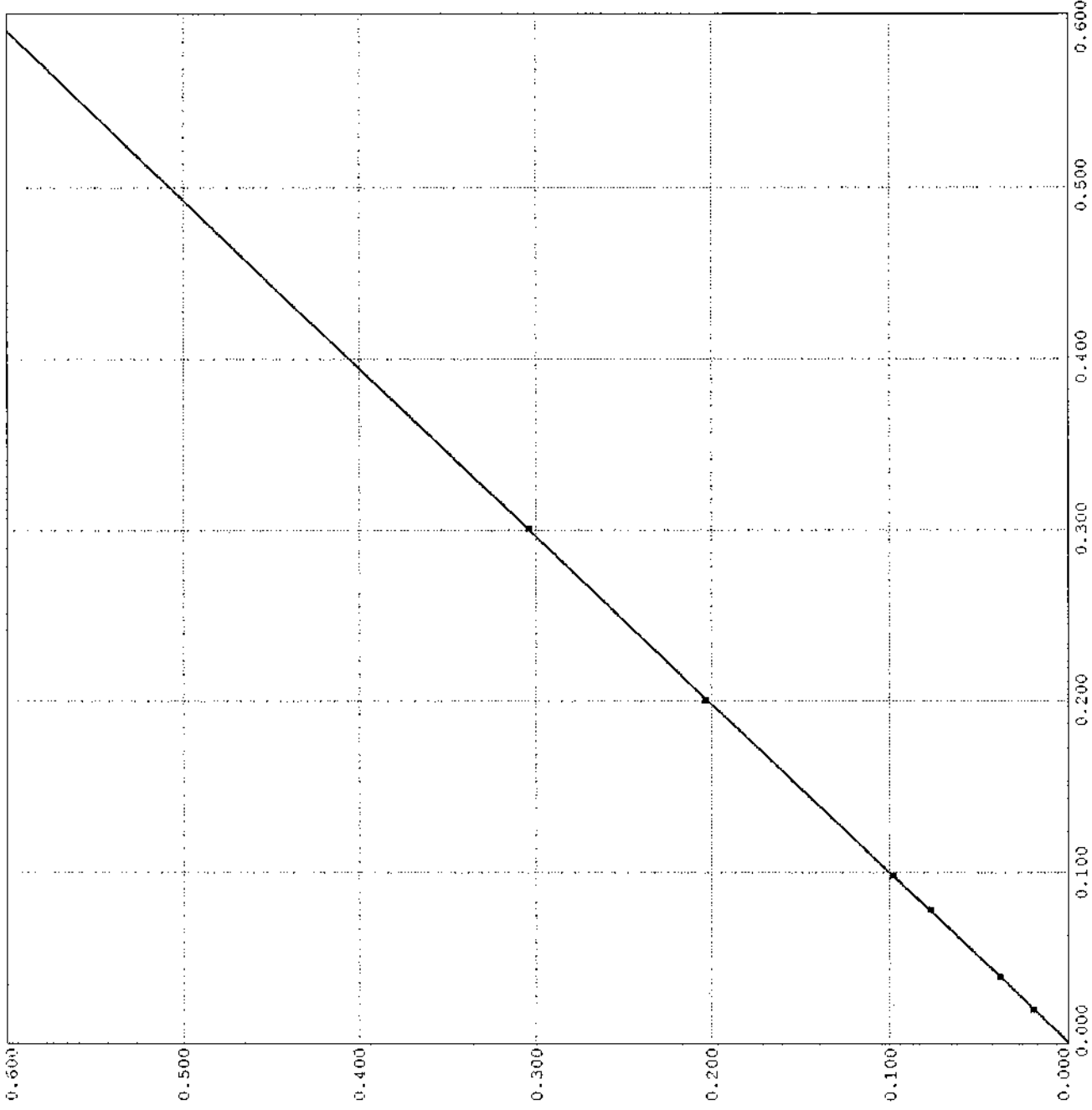
 Alaska Department of Public Safety
 DATAMASTER dmt: 100700

Date: 10/17/2017
 Time: 08:16:34

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0204	0.0005
0.039	0.0392	0.0004
0.078	0.0780	0.0000
0.098	0.0990	0.0000
0.200	0.2044	0.0005
0.300	0.3046	0.0005

SLOPE = 1.018678
 R² = 0.999951



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100700

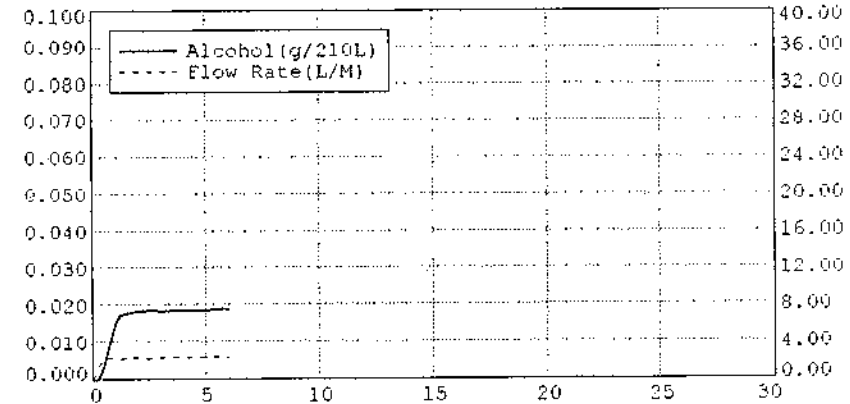
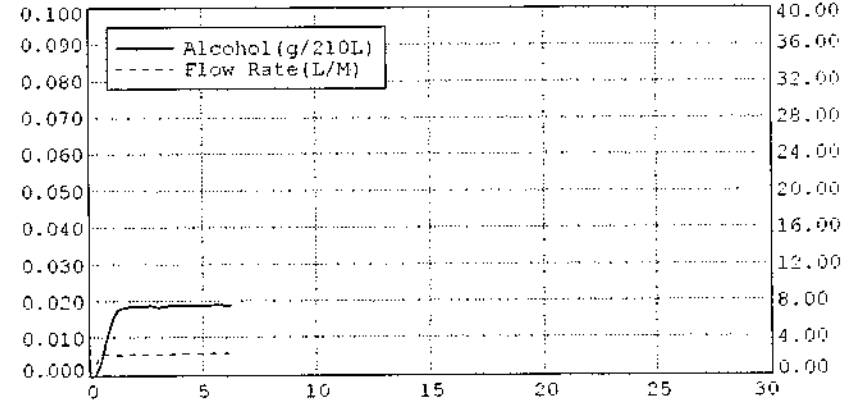
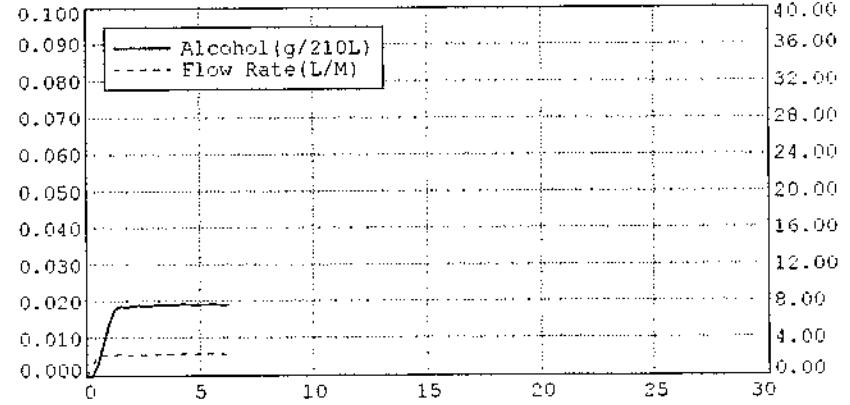
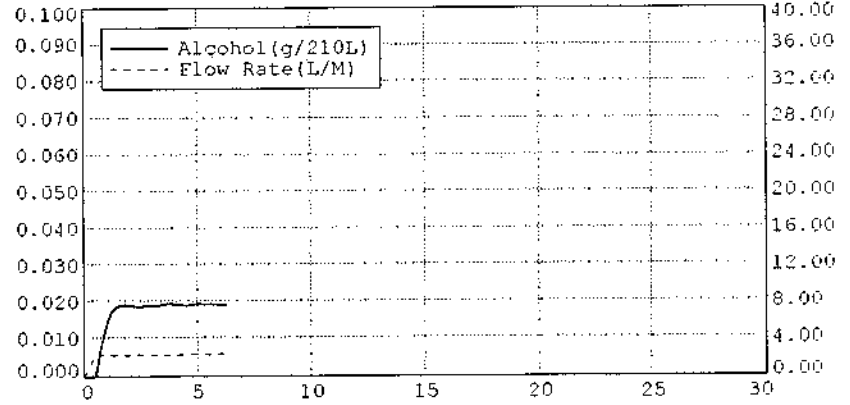
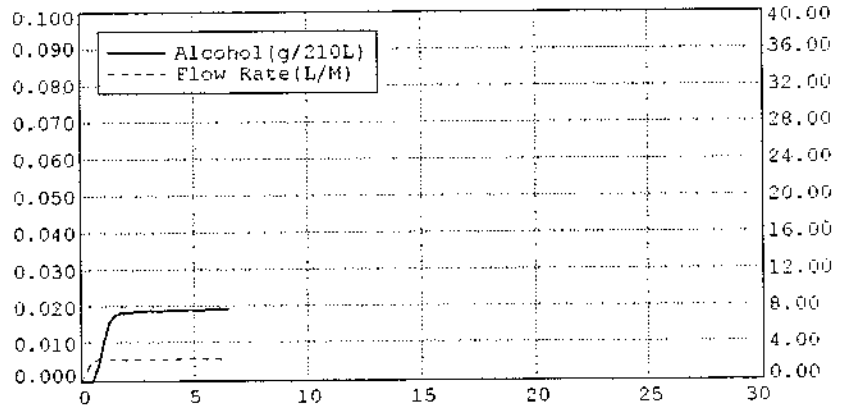
Date: 10/17/2017
 Time: 08:16:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.21: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 536 psi

BLANK TEST	0.000	08:24
INTERNAL STANDARD	VERIFIED	08:24
EXTERNAL STANDARD	0.021	08:24
BLANK TEST	0.000	08:25
EXTERNAL STANDARD	0.021	08:25
BLANK TEST	0.000	08:26
EXTERNAL STANDARD	0.020	08:26
BLANK TEST	0.000	08:27
EXTERNAL STANDARD	0.020	08:27
BLANK TEST	0.000	08:28
EXTERNAL STANDARD	0.020	08:29
BLANK TEST	0.000	08:29

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100700

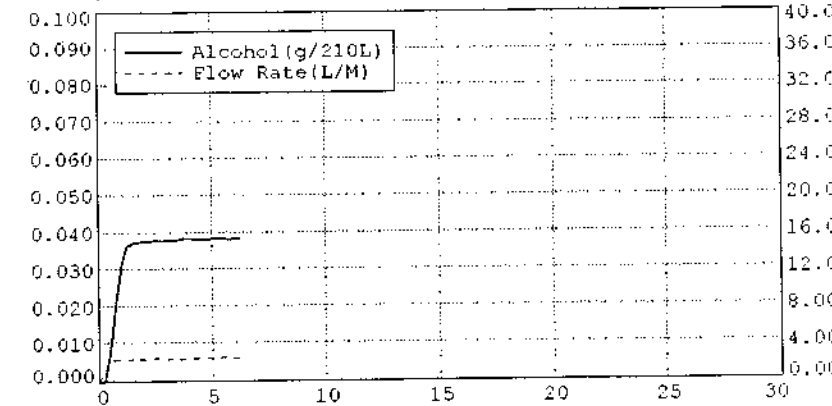
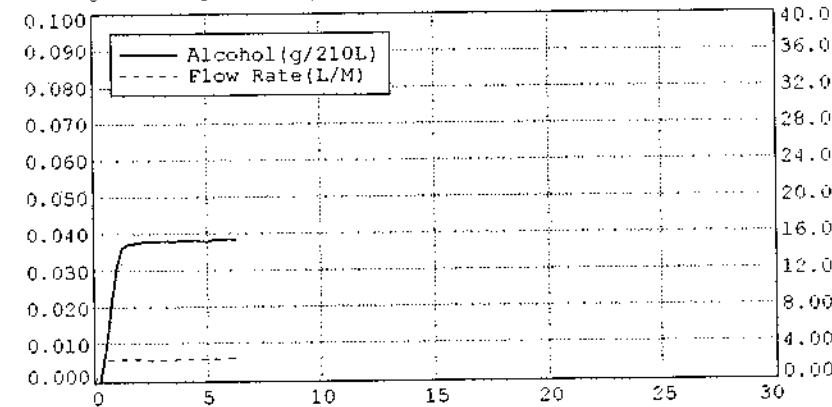
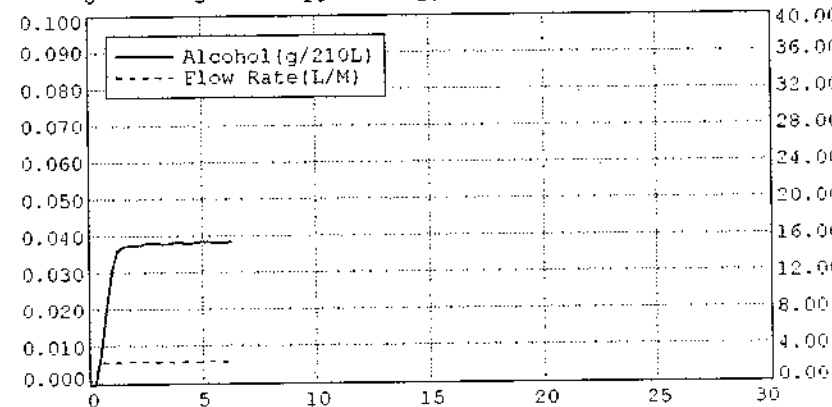
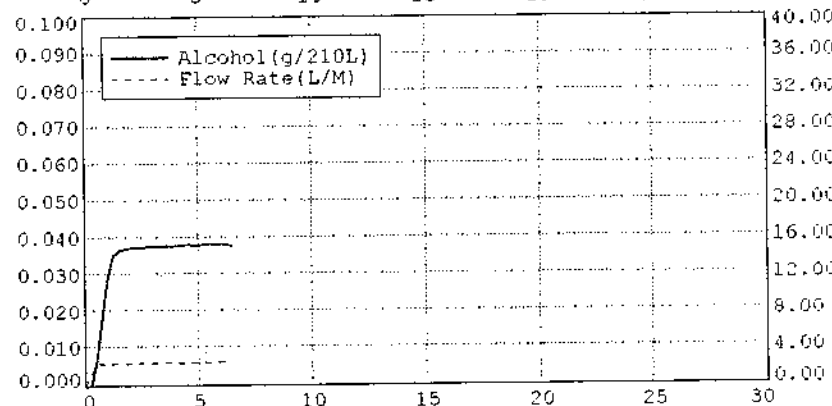
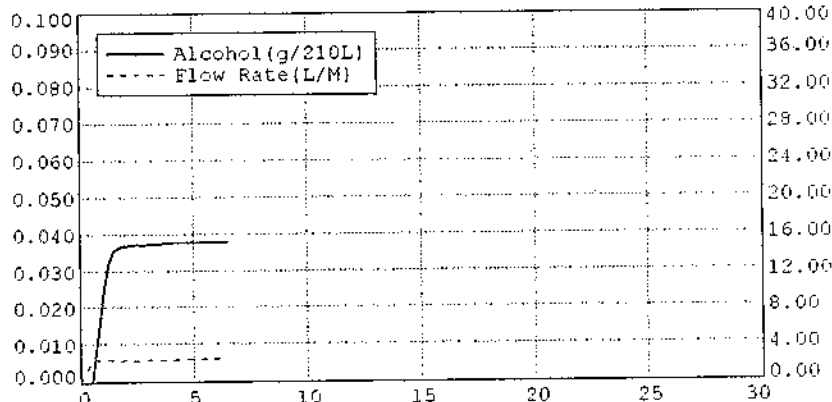
Date: 10/17/2017
 Time: 08:31:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.20: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 617 psi

BLANK TEST	0.000	08:32
INTERNAL STANDARD	VERIFIED	08:32
EXTERNAL STANDARD	0.039	08:33
BLANK TEST	0.000	08:34
EXTERNAL STANDARD	0.039	08:34
BLANK TEST	0.000	08:35
EXTERNAL STANDARD	0.040	08:35
BLANK TEST	0.000	08:36
EXTERNAL STANDARD	0.039	08:36
BLANK TEST	0.000	08:37
EXTERNAL STANDARD	0.039	08:37
BLANK TEST	0.000	08:38

Average = 0.0392
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

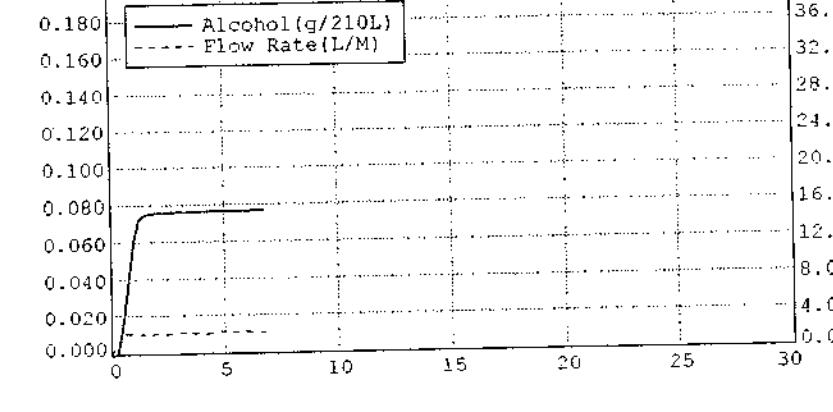
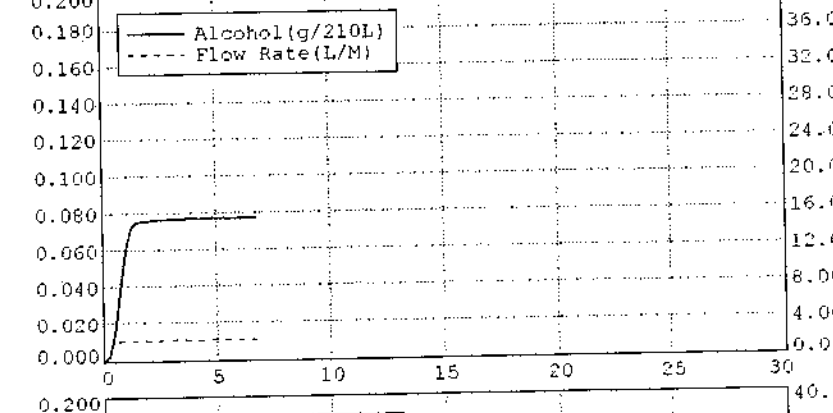
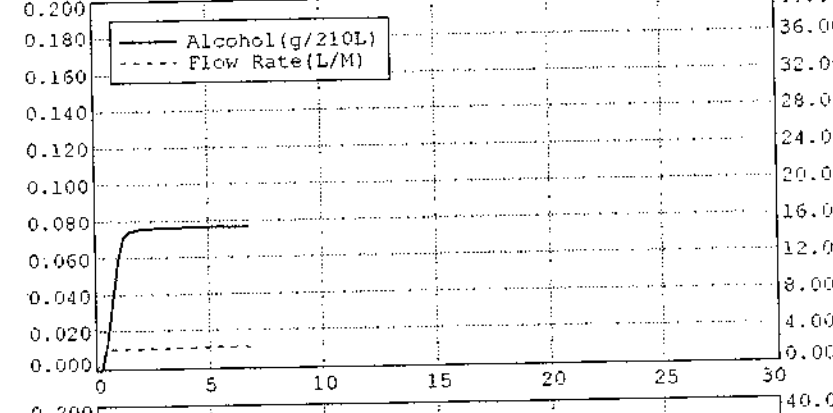
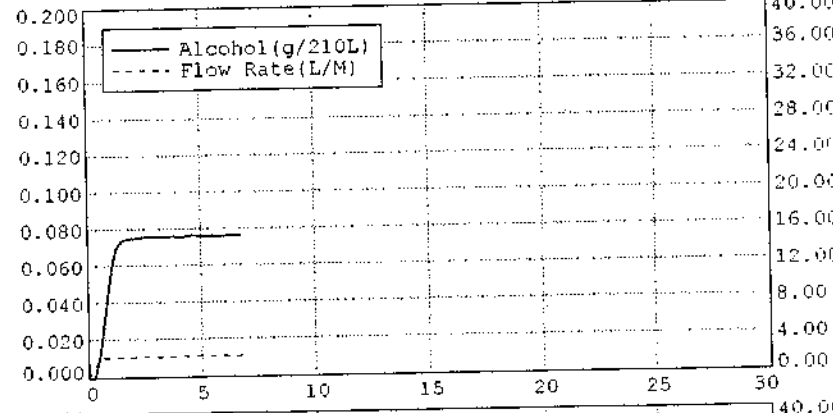
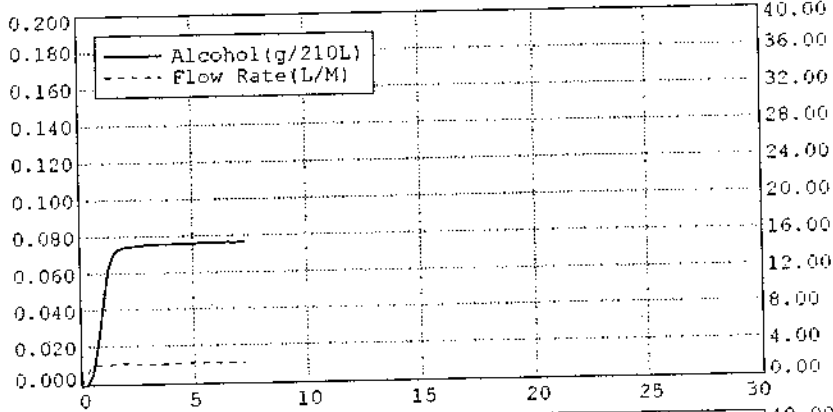
Alaska Department of Public Safety
 DATAMASTER dmt: 100700

Date: 10/17/2017
 Time: 08:39:23

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.21: 0.078
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 390 psi

BLANK TEST	0.000	08:42
INTERNAL STANDARD	VERIFIED	08:42
EXTERNAL STANDARD	0.078	08:42
BLANK TEST	0.000	08:43
EXTERNAL STANDARD	0.078	08:43
BLANK TEST	0.000	08:44
EXTERNAL STANDARD	0.078	08:44
BLANK TEST	0.000	08:45
EXTERNAL STANDARD	0.078	08:45
BLANK TEST	0.000	08:46
EXTERNAL STANDARD	0.078	08:47
BLANK TEST	0.000	08:47

Average = 0.0780
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

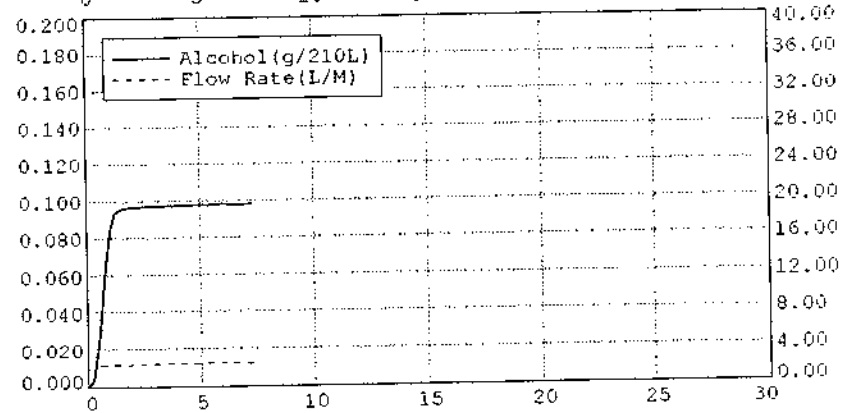
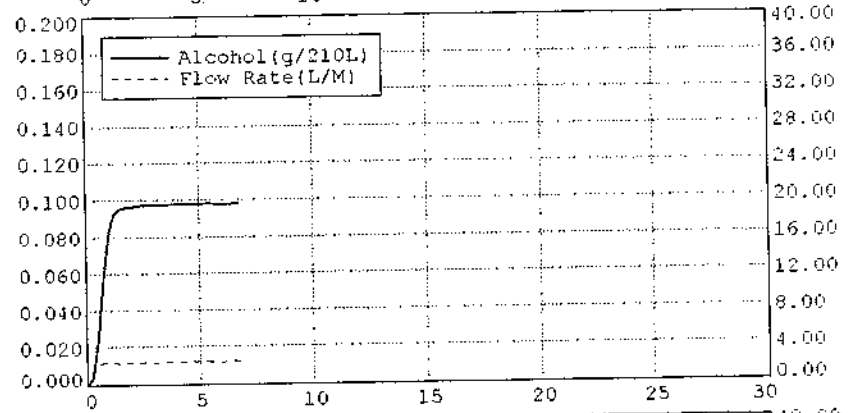
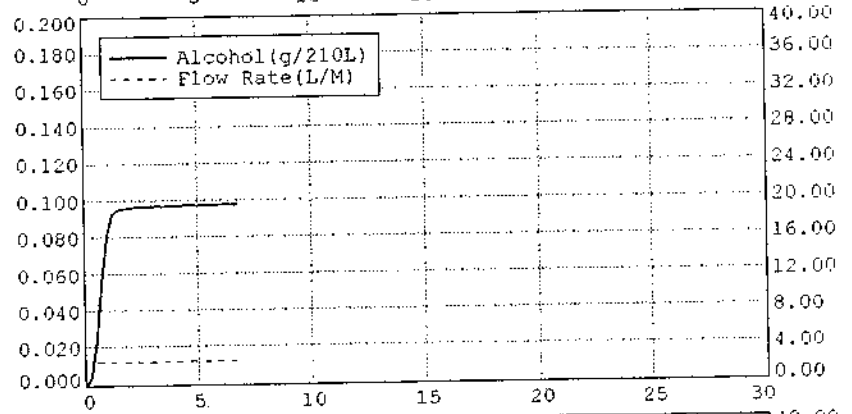
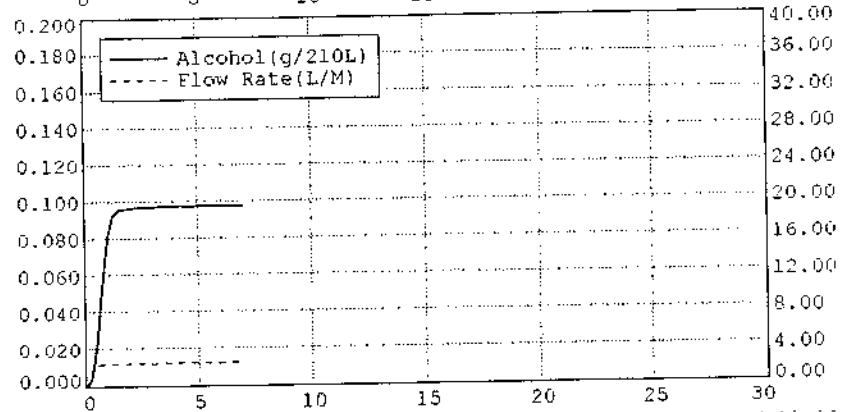
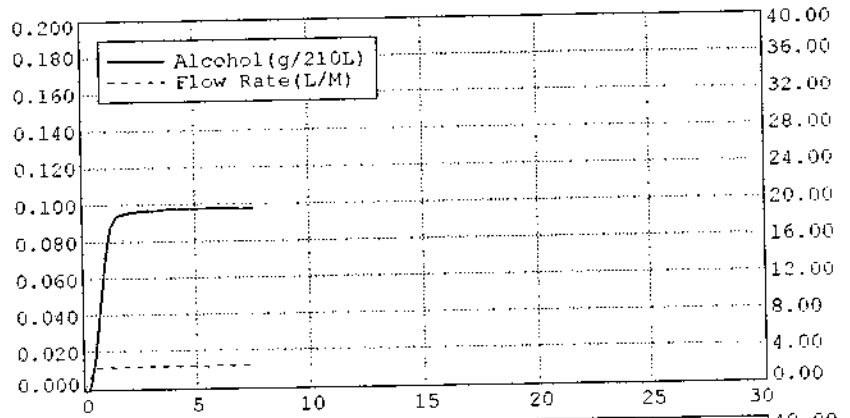
Alaska Department of Public Safety
 DATAMASTER dmt: 100700

Date: 10/17/2017
 Time: 08:49:45

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.100
 TARGET AT 29.20: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 765 psi

BLANK TEST	0.000	08:50
INTERNAL STANDARD	VERIFIED	08:50
EXTERNAL STANDARD	0.099	08:51
BLANK TEST	0.000	08:52
EXTERNAL STANDARD	0.099	08:52
BLANK TEST	0.000	08:53
EXTERNAL STANDARD	0.099	08:53
BLANK TEST	0.000	08:54
EXTERNAL STANDARD	0.099	08:54
BLANK TEST	0.000	08:55
EXTERNAL STANDARD	0.099	08:55
BLANK TEST	0.000	08:56

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

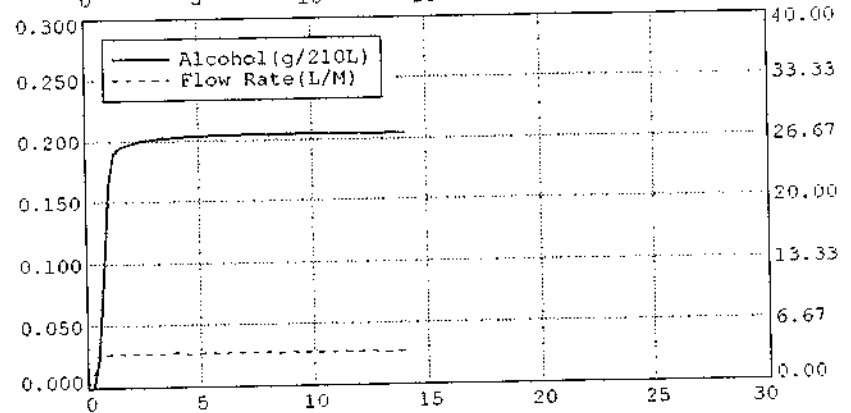
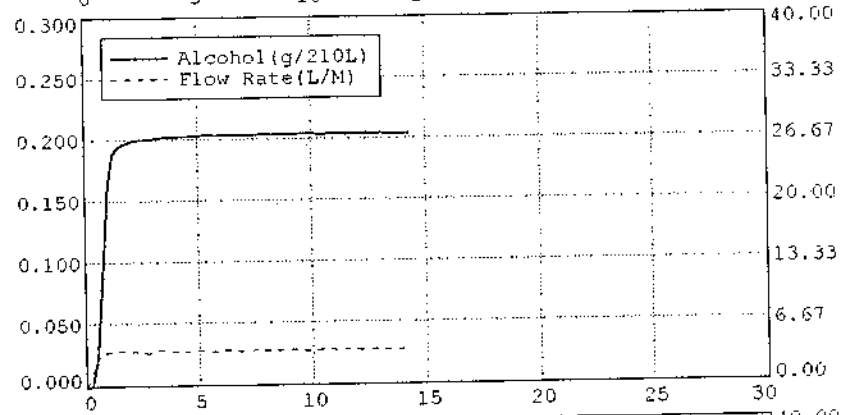
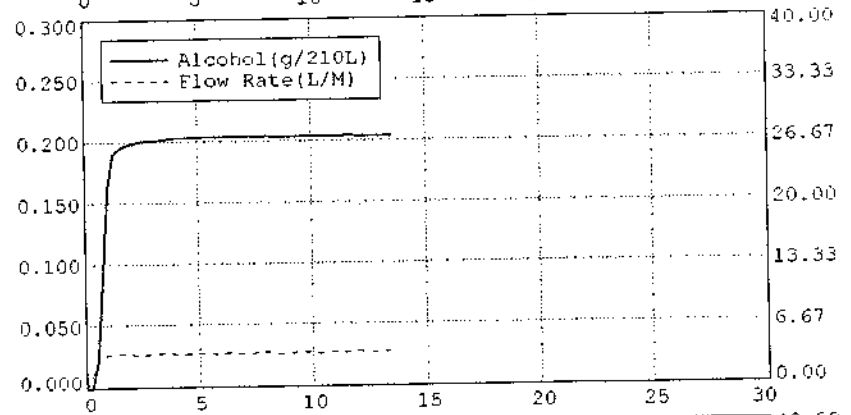
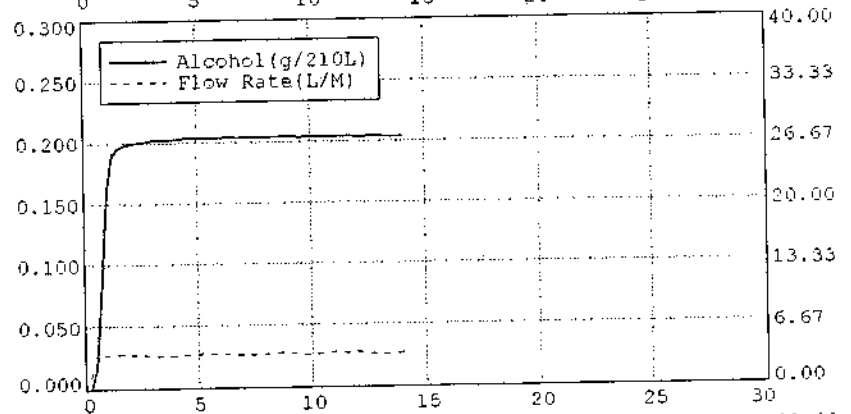
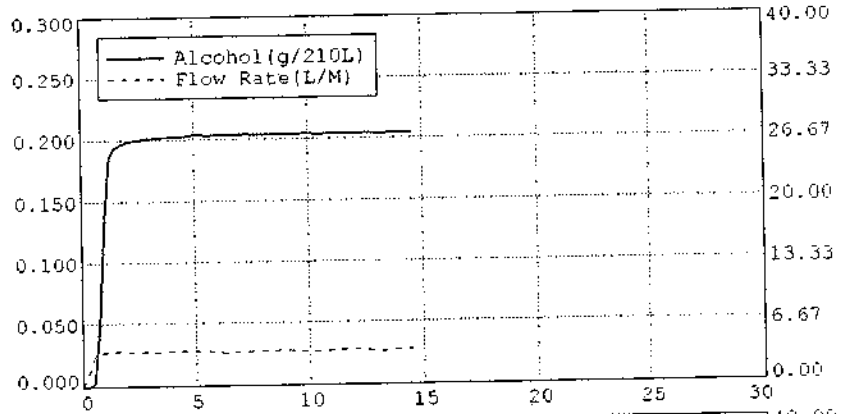
Alaska Department of Public Safety
 DATAMASTER dmt: 100700

Date: 10/17/2017
 Time: 08:58:31

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 17090
 EXPIRATION: 02/24/2019

BLANK TEST	0.000	08:59
INTERNAL STANDARD	VERIFIED	08:59
EXTERNAL STANDARD	0.205	09:00
BLANK TEST	0.000	09:01
EXTERNAL STANDARD	0.204	09:01
BLANK TEST	0.000	09:02
EXTERNAL STANDARD	0.204	09:02
BLANK TEST	0.000	09:03
EXTERNAL STANDARD	0.204	09:03
BLANK TEST	0.000	09:04
EXTERNAL STANDARD	0.205	09:05
BLANK TEST	0.000	09:06

Average = 0.2044
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

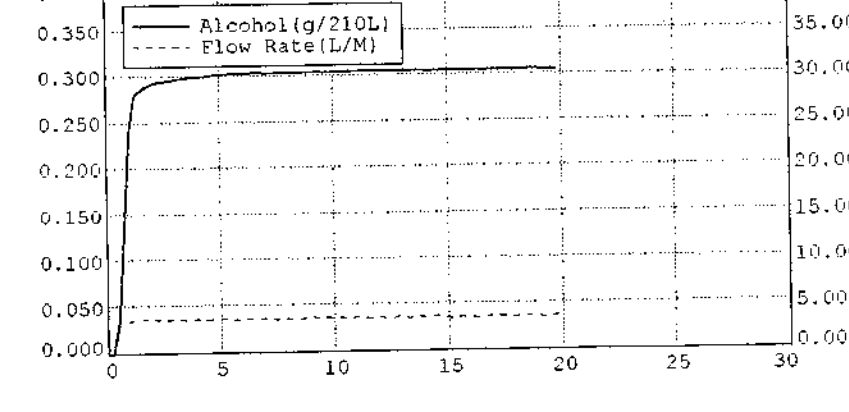
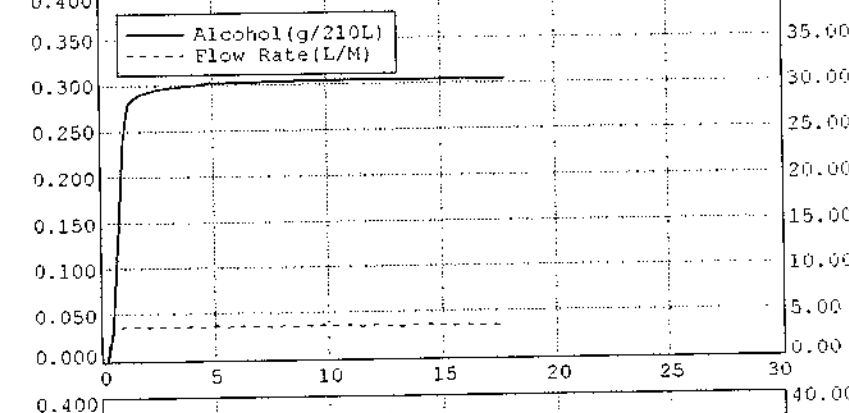
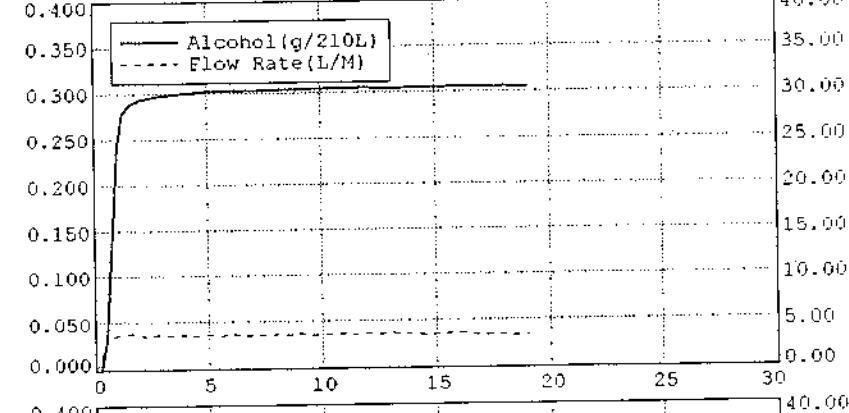
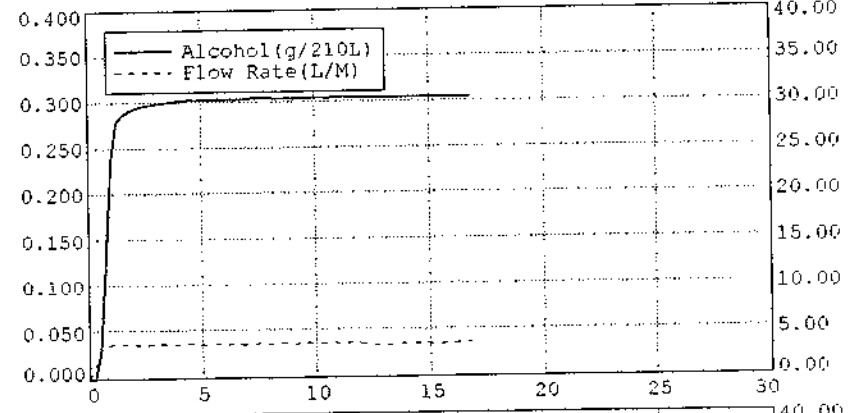
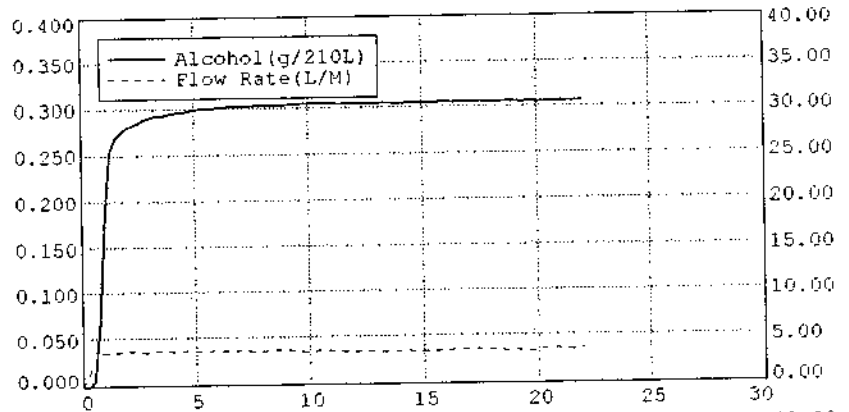
Alaska Department of Public Safety
 DATAMASTER dmt: 100700

Date: 10/17/2017
 Time: 09:08:15

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 16410
 EXPIRATION: 12/19/2018

BLANK TEST	0.000	09:09
INTERNAL STANDARD	VERIFIED	09:09
EXTERNAL STANDARD	0.305	09:10
BLANK TEST	0.000	09:10
EXTERNAL STANDARD	0.304	09:11
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.305	09:12
BLANK TEST	0.000	09:13
EXTERNAL STANDARD	0.304	09:14
BLANK TEST	0.000	09:14
EXTERNAL STANDARD	0.305	09:15
BLANK TEST	0.000	09:16

Average = 0.3046
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/17/2017
Time: 09:44:11

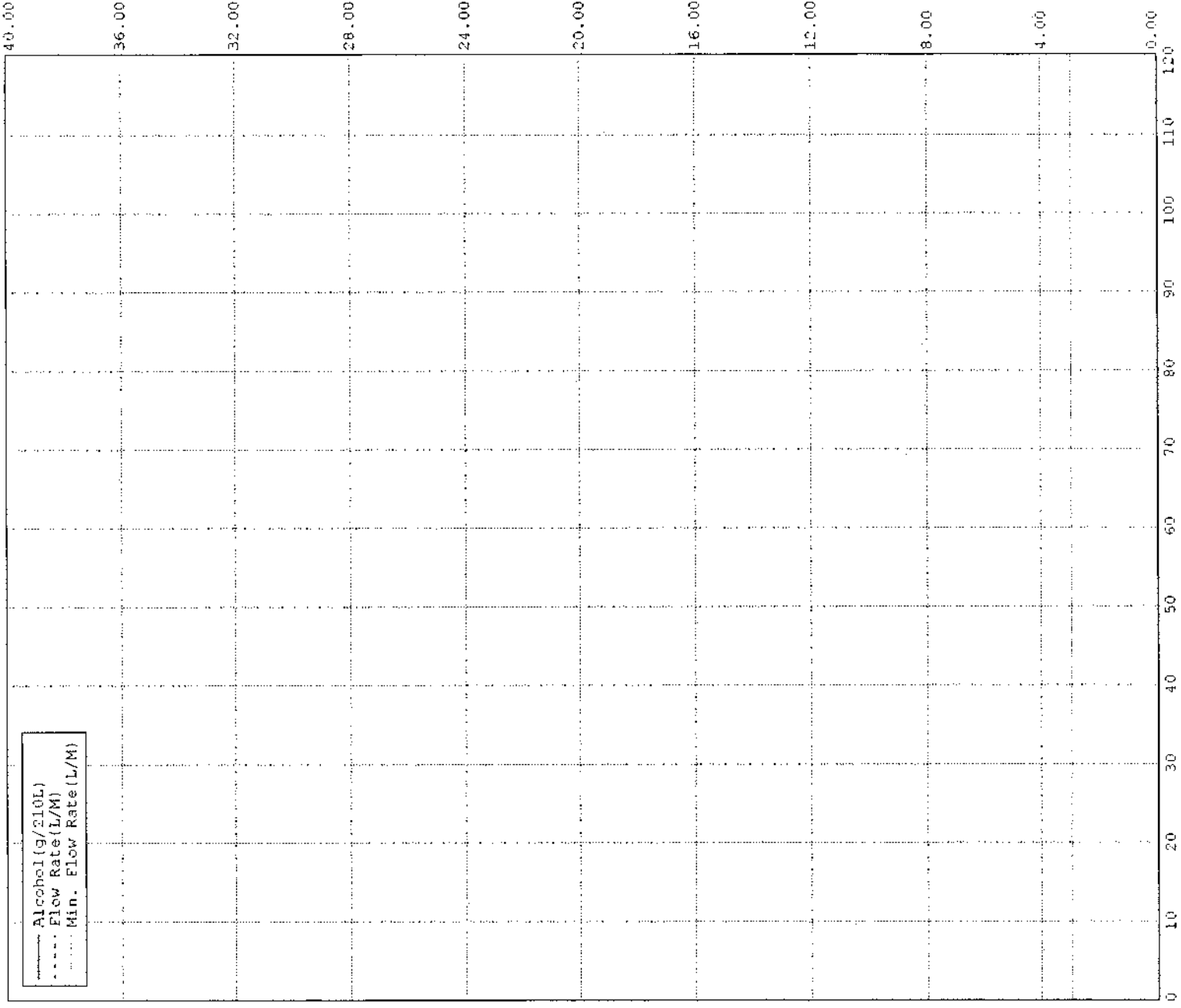
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 10:02
BLANK TEST 0.000 10:02
INTERNAL STANDARD VERIFIED 10:02
EXTERNAL STANDARD 0.078 10:03
BLANK TEST 0.000 10:04
SUBJECT SAMPLE INCOMPLETE 10:06



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/17/2017
Time: 10:10:16

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

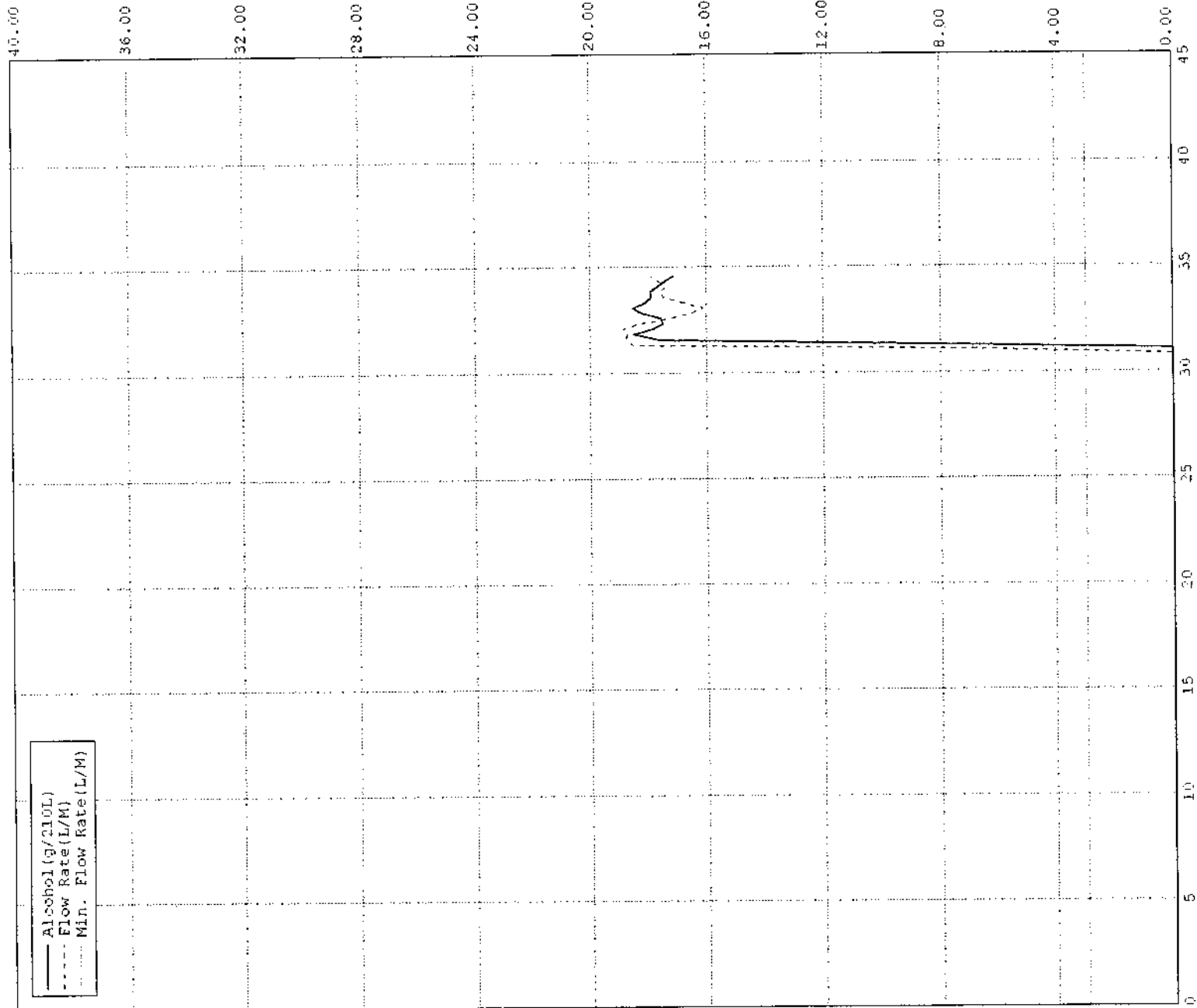
OPERATOR NAME:
COLLEEN S CRRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 10:12
BLANK TEST 0.000 10:13
INTERNAL STANDARD VERIFIED 10:13
EXTERNAL STANDARD 0.078 10:13
BLANK TEST 0.000 10:14
SUBJECT SAMPLE INVALID 10:14

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/17/2017
Time: 09:22:51

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

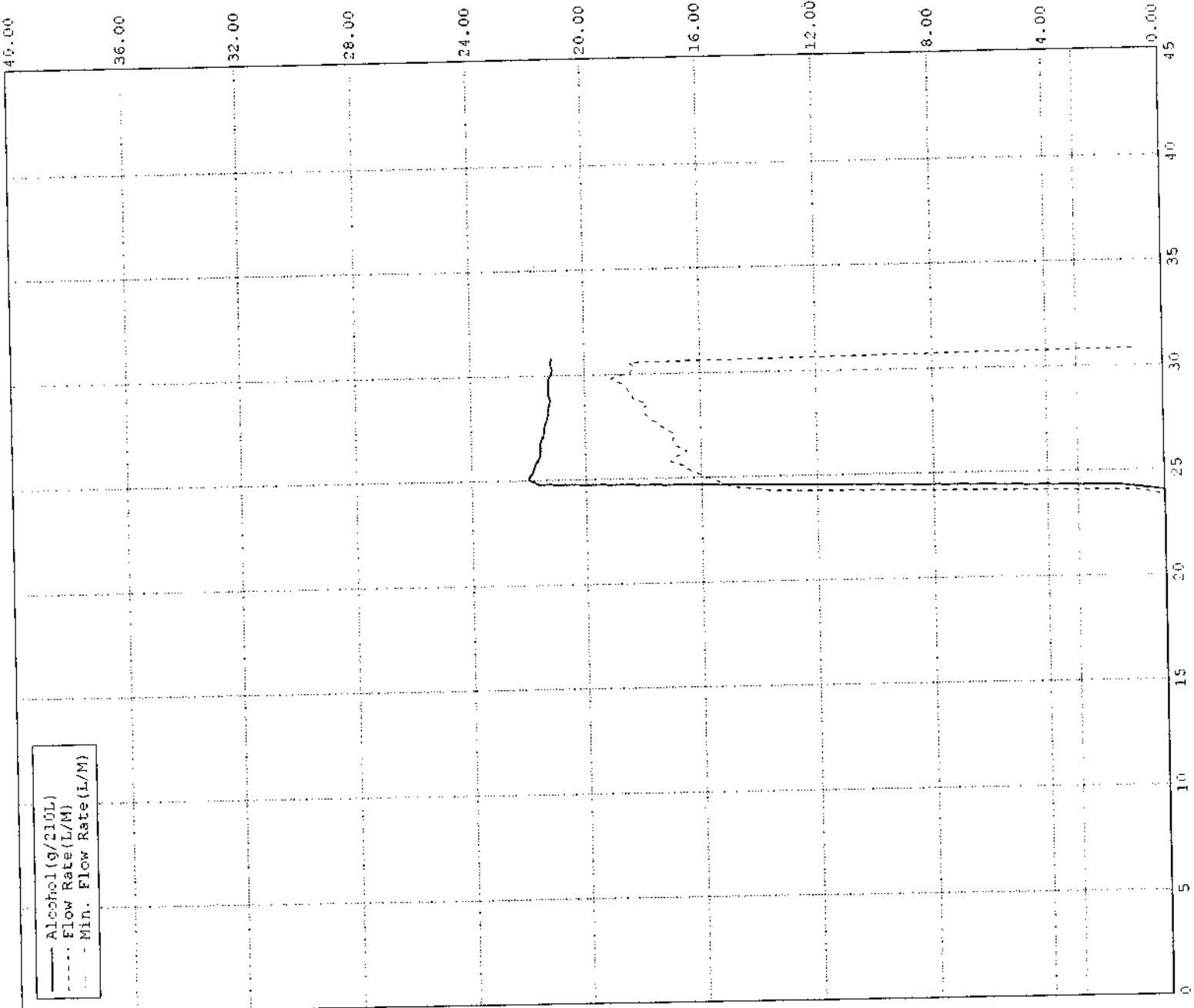
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAAI
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 09:24
BLANK TEST 0.000 09:24
INTERNAL STANDARD VERIFIED 09:24
Xq = 0.080 (0.76%) 0.077 09:24
EXTERNAL STANDARD X[1] = 0.0775 (-0.0009) (0.0029) 0.000 09:25
BLANK TEST XXX 09:26
SUBJECT SAMPLE X[1] = 0.1055 (-0.0157) (0.0028)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/17/2017
Time: 09:29:05

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:30
BLANK TEST	0.000	09:30
INTERNAL STANDARD	VERIFIED	09:30
$X\bar{q}$ = 0.080 (0.11%)		
EXTERNAL STANDARD	0.078	09:30
$X[1]$ = 0.0779 (-0.0001)	(0.0031)	
BLANK TEST	0.000	09:31
SUBJECT SAMPLE	XXX	09:32
$X[1]$ = 0.1147 (-0.0196)	(0.0015)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/17/2017
Time: 09:35:31

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

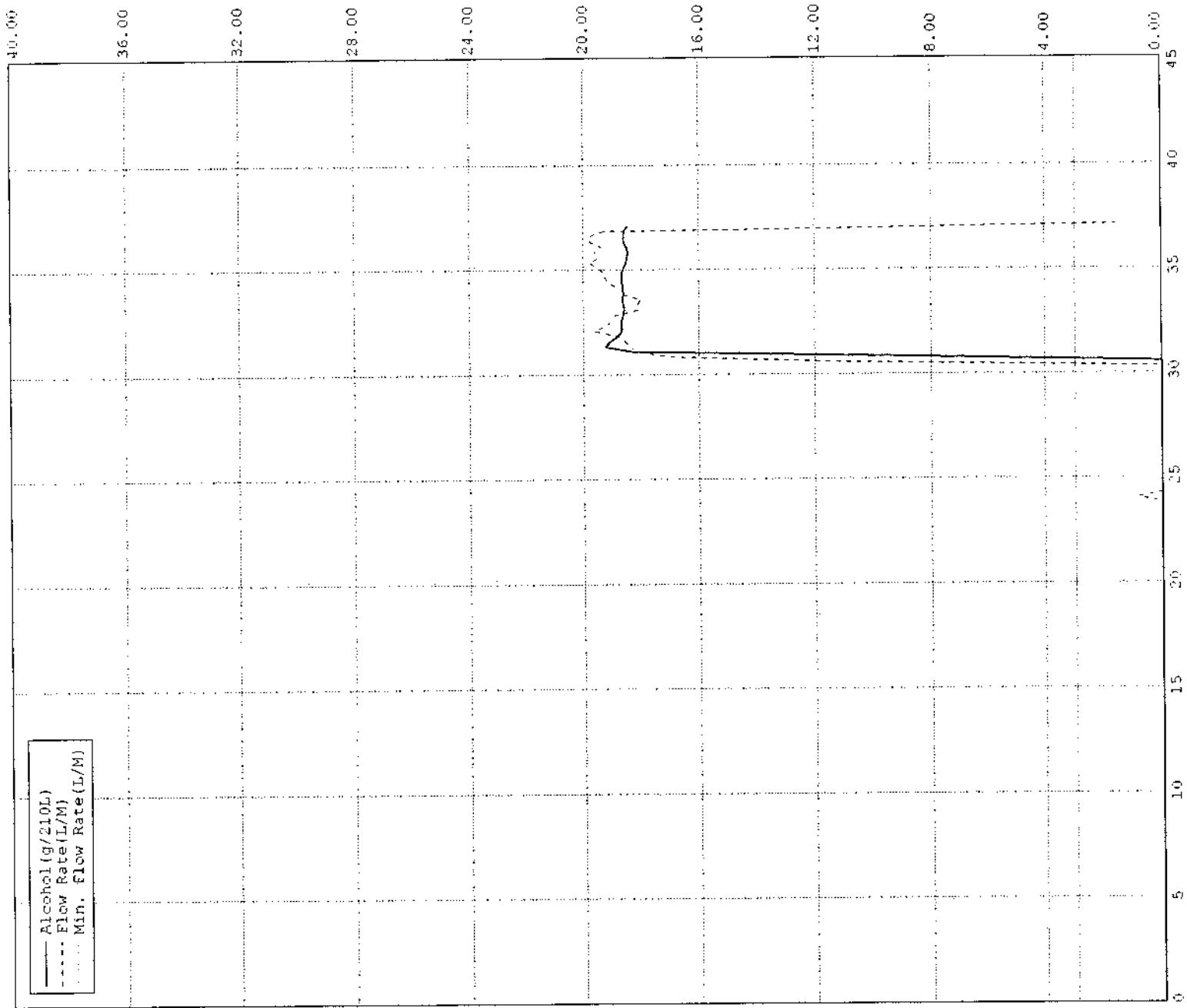
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:36
BLANK TEST	0.000	09:36
INTERNAL STANDARD	VERIFIED	09:36
Xq = 0.081 (0.11%)		
EXTERNAL STANDARD	0.078	09:36
X[1] = 0.0779 (0.0003) (0.0027)		
BLANK TEST	0.000	09:37
SUBJECT SAMPLE (Vol=2.02L)	0.092	09:38
X[1] = 0.0928 (0.0003) (0.0013)		
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.078	09:39
X[1] = 0.0777 (0.0001) (0.0027)		
BLANK TEST	0.000	09:40

Filter 2 avg = -0.0002
Filter 3 avg = 0.0029

CRB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/17/2017
Time: 10:20:14

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

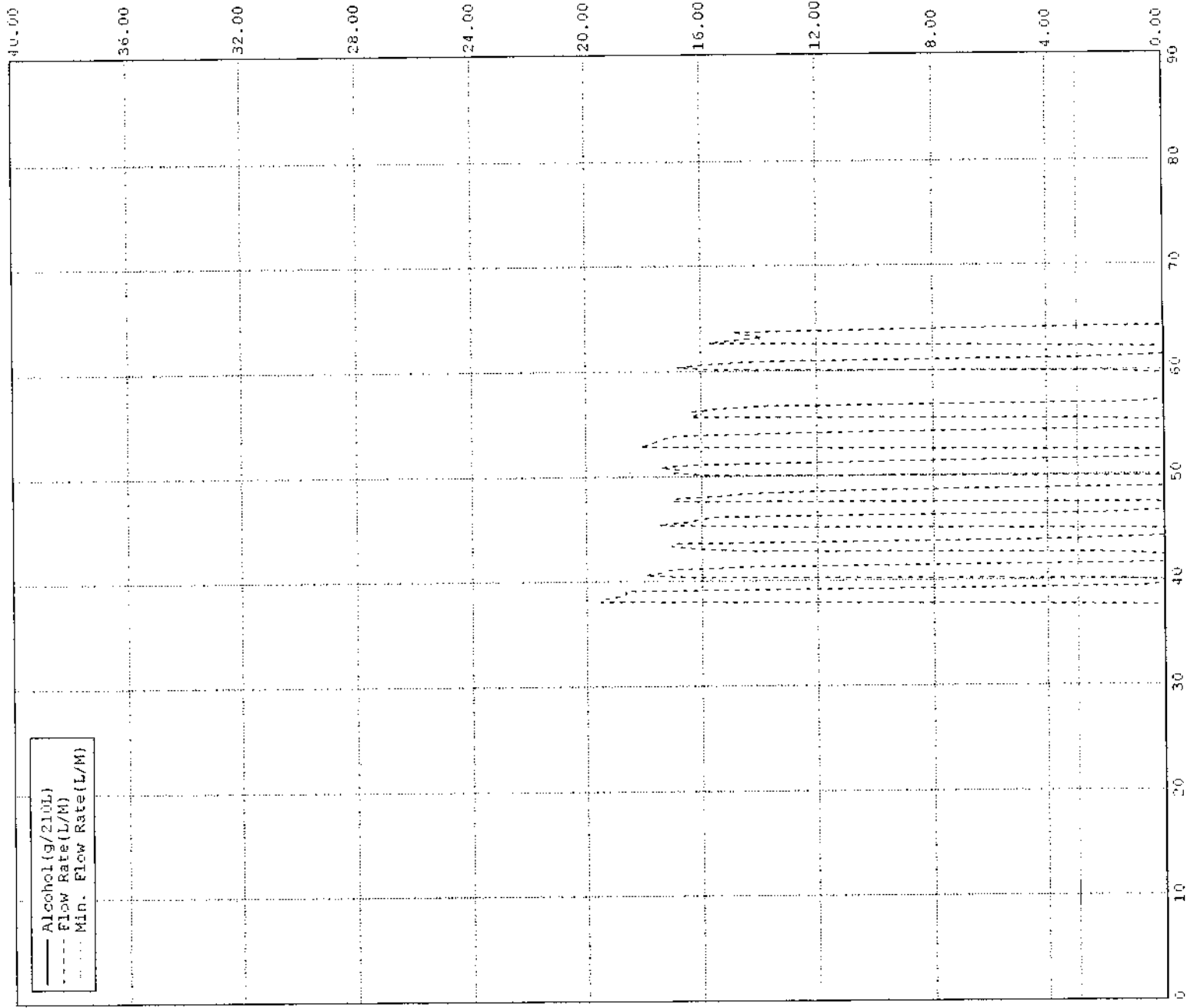
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	10:21
BLANK TEST	0.000	10:21
INTERNAL STANDARD	VERIFIED	10:22
EXTERNAL STANDARD	0.078	10:22
BLANK TEST	0.000	10:23
SUBJECT SAMPLE	XXX	10:24

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/17/2017
Time: 10:30:21

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

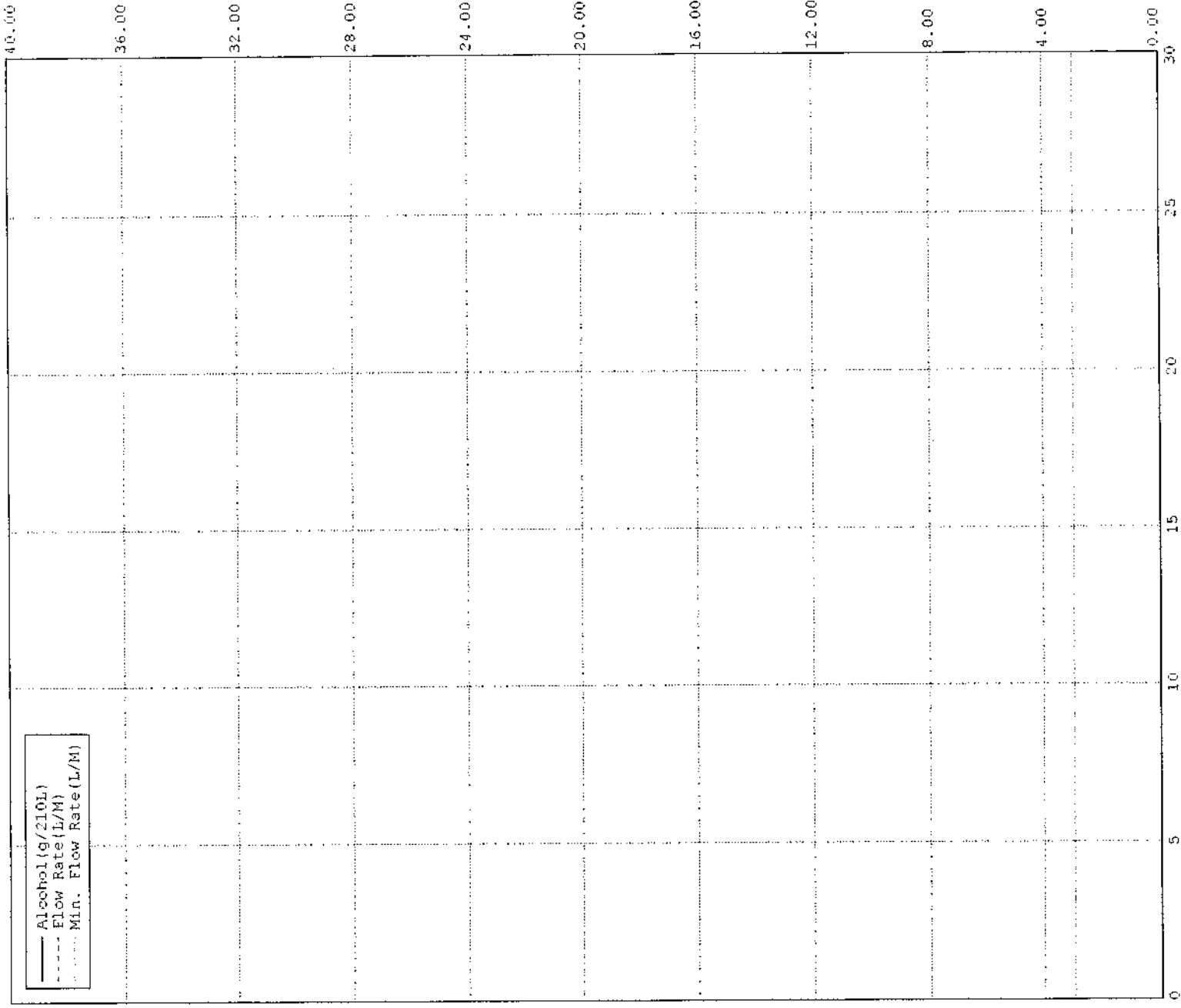
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 10:31
BLANK TEST 0.000 10:31
INTERNAL STANDARD VERIFIED 10:31
EXTERNAL STANDARD 0.078 10:32
BLANK TEST 0.000 10:33

RFI DETECTED

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100700

Date: 10/17/2017
Time: 10:47:00

SUBJECT NAME:
TEST TEST
LICENSE #: NON-DRINKING

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	10:48
BLANK TEST	0.000	10:48
INTERNAL STANDARD	VERIFIED	10:48
EXTERNAL STANDARD	0.079	10:48
BLANK TEST	0.000	10:49
SUBJECT SAMPLE (Vol=2.16L)	0.000	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.079	10:50
BLANK TEST	0.000	10:51

