

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 100364 Analyst Colleen O'Bryant Start Date 10/28/15

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 1.0 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf ILMO Lot 02915020A2 Exp 3/5/17
- ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
- iii. 0.080g/210L Mnf ILMO Lot 01315080A2 Exp 2/5/17
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/11/17
 - 1. Simulator S/N DE 0267 Date Calibrated 1/20/15
- vi. 0.300g/210L Mnf Guth Lot 14270 Exp 12/2/16
 - 1. Simulator S/N DE 4162 Date Calibrated 1/19/15

5. Functional Tests (attached)

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

- i. Acetone - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DE 4163 Date Calibrated 1/19/15
- ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N SD 1176 Date Calibrated 1/20/15
- iii. Negative Control - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DE 4178 Date Calibrated 1/19/15

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 11/2/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 10/28/2015
Time: 11:05:06

VERSIONS

DMT: 3.01
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.94 V PASSED
(1.16 V - 2.72 V)
Cooler Voltage = 1.97 V PASSED
(1.18 V - 2.76 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 524 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.1 in

PUMP INFO

Flow Rate = 5.080 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 = 0.099 0.54% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100364

Date: 10/28/2015
Time: 12:12 PM

Temperatures (°C)

Sample Cell: 48.7°C
Breath Tube: 47.1°C

Current Barometer 29.1 in
Volume (Ltr) 1.45

Settings

Lamp: 1.99 V
Bias: 80 V
Cooler: 1.91 V
Chopper: 516 Hz

Voltages (V)

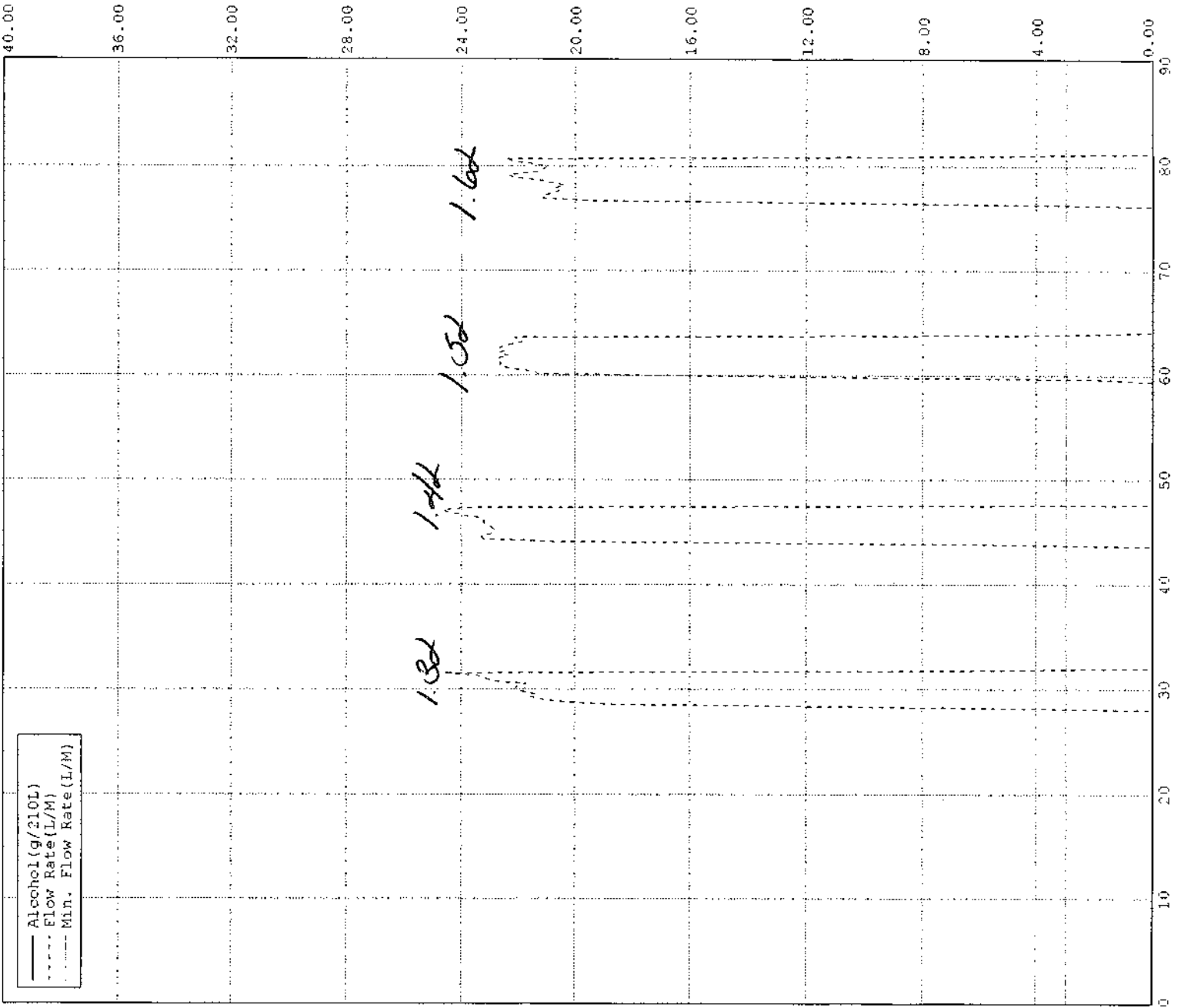
Flow: 1.03 V
Detector: 0.055 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 10/02/2015
Time: 09:52:21

Ca = 0.1010
CAL = 0.997233 0.800 <= CAL < 1.200
b1 = 0.0012 0.0000 <= b1 < 0.0040
b2 = 0.0058 0.0010 <= b2 < 0.0100
b3 = 0.0005 0.0000 <= b3 < 0.0040
Xq = 0.0980 0.0500 <= Xq < 0.2000
a21 = 1.177996 1.050 <= a21 < 1.300
a31 = 0.602952 0.300 <= a31 < 0.800



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100364

 Date: 10/28/2015
 Time: 12:13:56

SUBJECT NAME:
 TEST TEST
 LICENSE #: VOLUME TEST

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

DEPT/AGENCY:
 AAA1

CASE/REPORT: 15-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.06: 0.078
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017

TEST TYPE	TIME	RESULT
DIAGNOSTIC CHECK	12:16	PASSED
BLANK TEST	12:16	0.000
INTERNAL STANDARD	12:16	VERIFIED
EXTERNAL STANDARD	12:17	0.079
BLANK TEST	12:18	0.000
SUBJECT SAMPLE (Vol=1.57L)	12:19	0.000
BLANK TEST	12:20	0.000
EXTERNAL STANDARD	12:20	0.079
BLANK TEST	12:21	0.000

LINEARITY CHECK

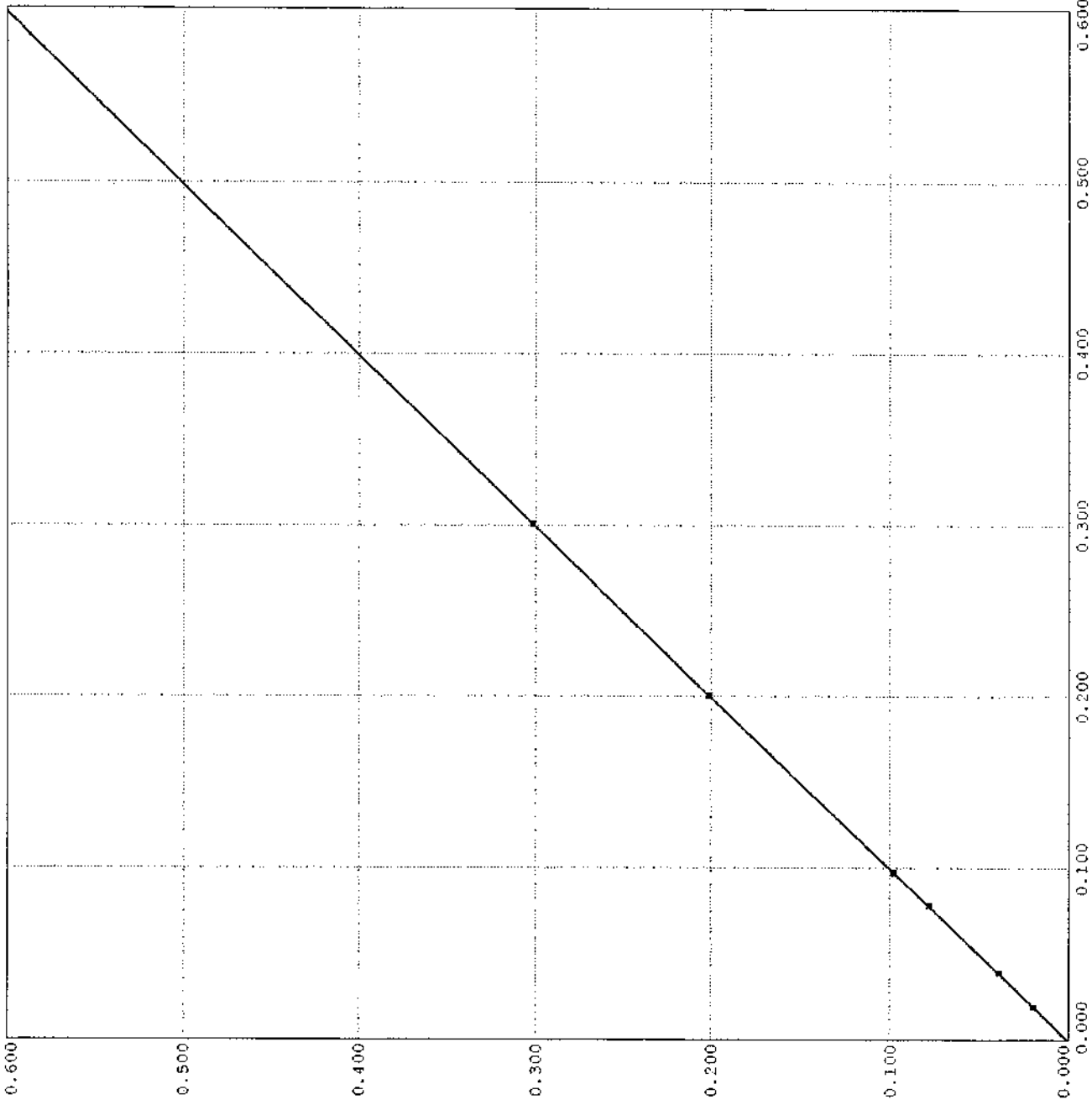
Alaska Department of Public Safety
 DATAMASTER dmt: 100364

Date: 10/28/2015
 Time: 12:25:02

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

TARGET	AVERAGE	STD. DEV.
0.019	0.0208	0.0004
0.039	0.0400	0.0000
0.078	0.0790	0.0000
0.097	0.0988	0.0004
0.200	0.2020	0.0000
0.300	0.3022	0.0008

SLOPE = 1.003261
 R² = 0.999988



CAS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100364

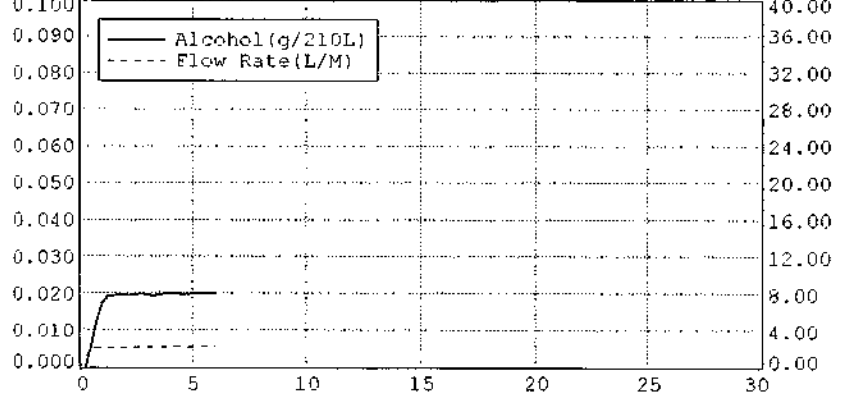
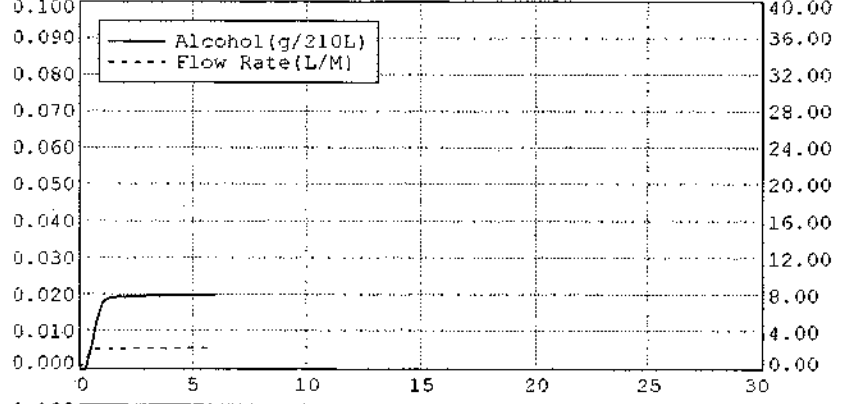
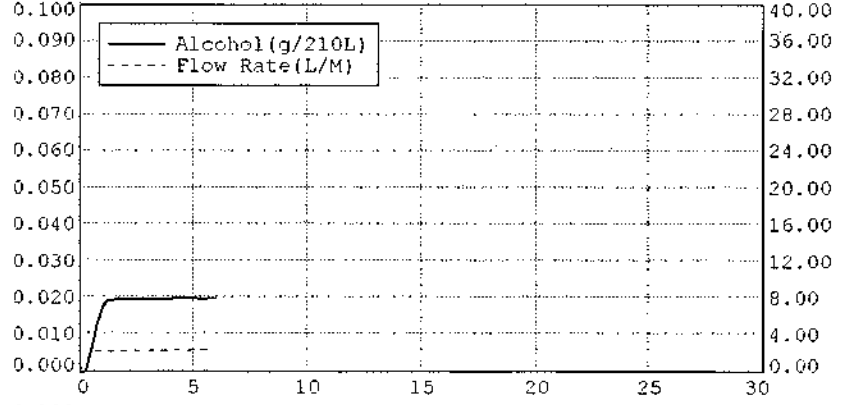
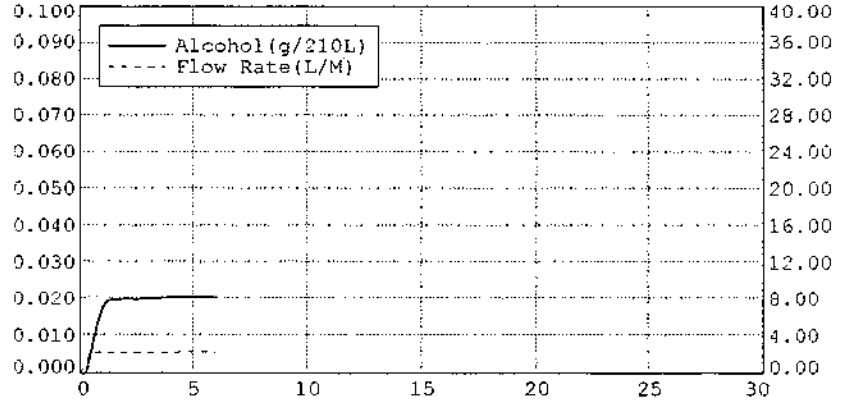
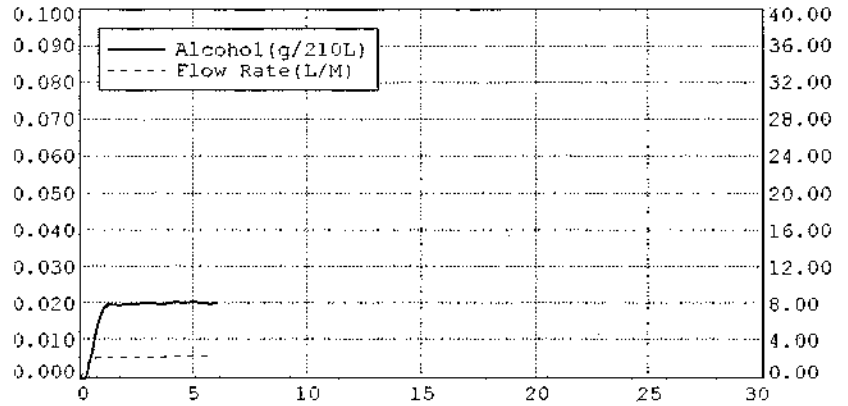
Date: 10/28/2015
 Time: 12:25:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.05: 0.019
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 840 psi

BLANK TEST	0.000	12:42
INTERNAL STANDARD	VERIFIED	12:42
EXTERNAL STANDARD	0.021	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.021	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.020	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.021	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.021	12:47
BLANK TEST	0.000	12:48

Average = 0.0208
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100364

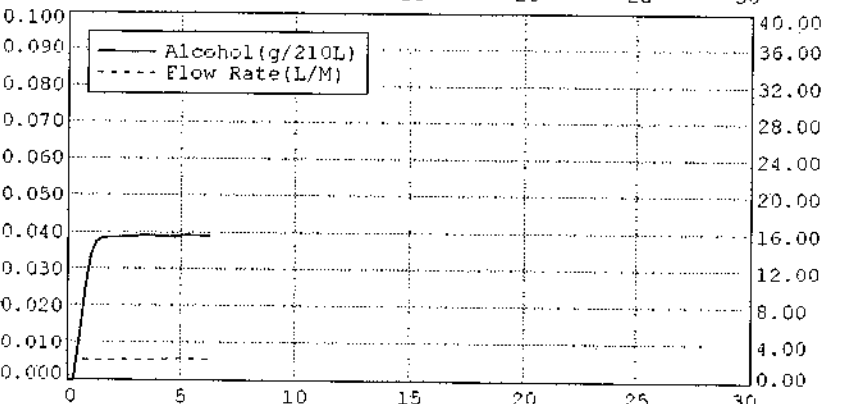
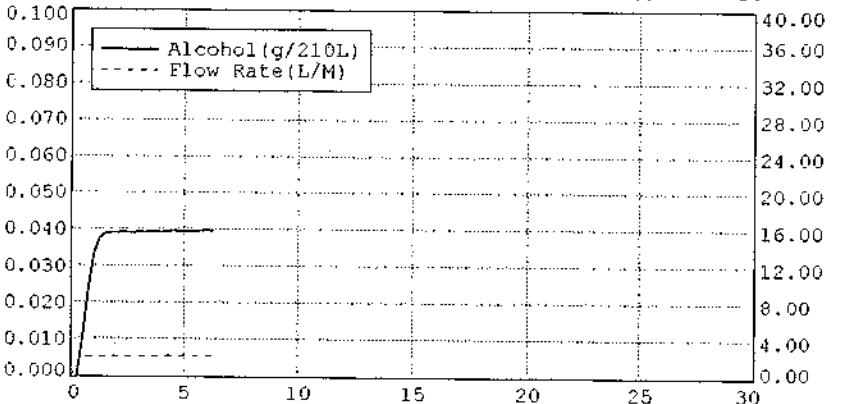
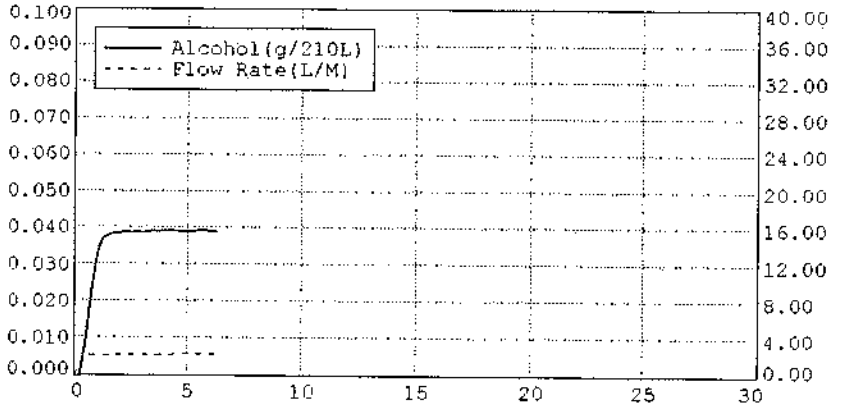
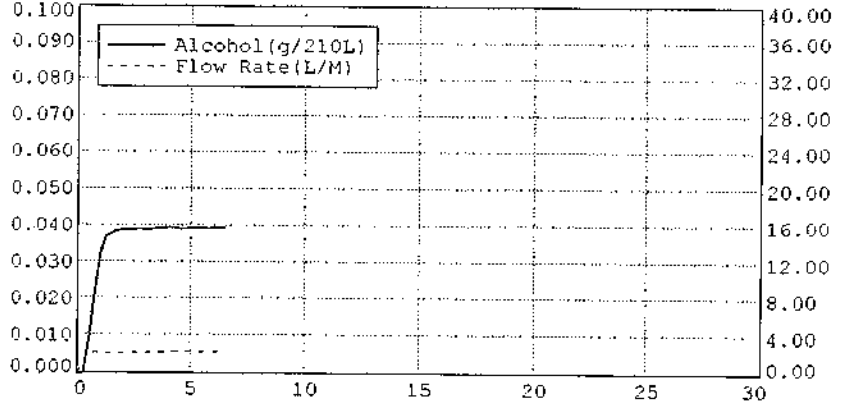
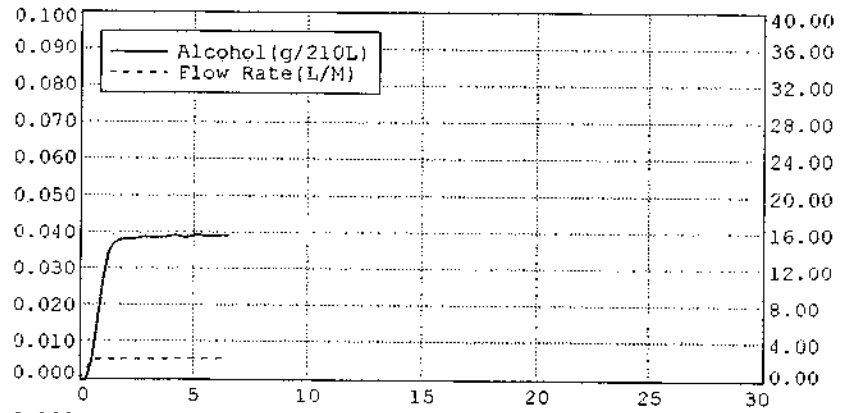
Date: 10/28/2015
 Time: 12:51:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.05: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 875 psi

BLANK TEST	0.000	12:52
INTERNAL STANDARD	VERIFIED	12:52
EXTERNAL STANDARD	0.040	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.040	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.040	12:55
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.040	12:56
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.040	12:57
BLANK TEST	0.000	12:58

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100364

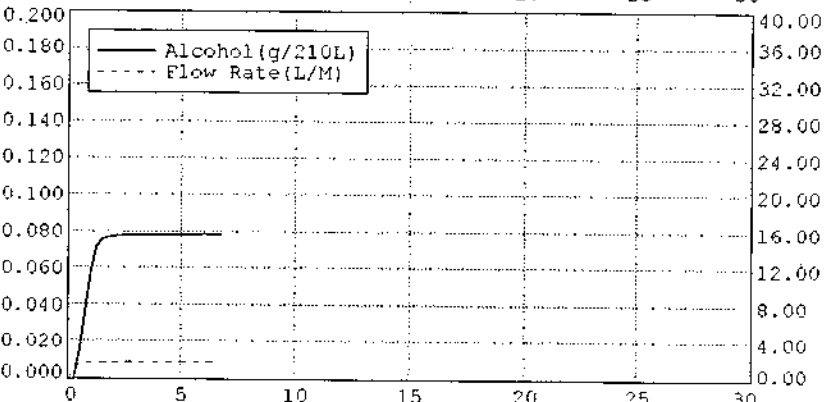
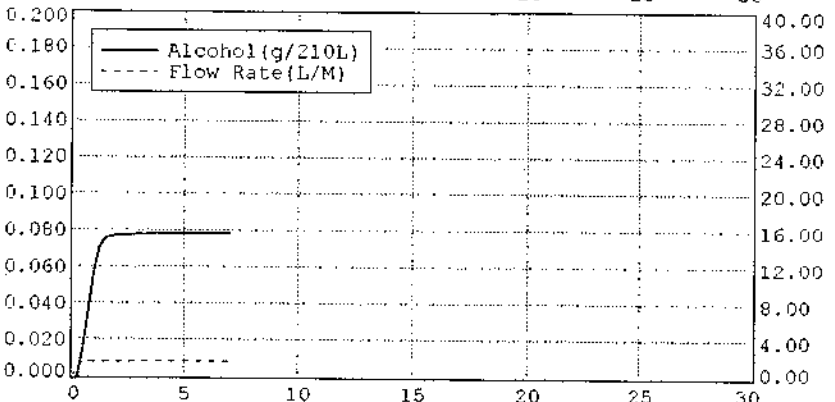
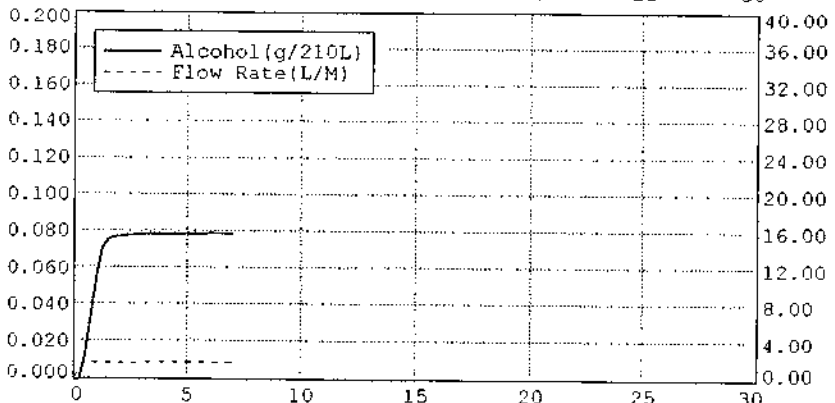
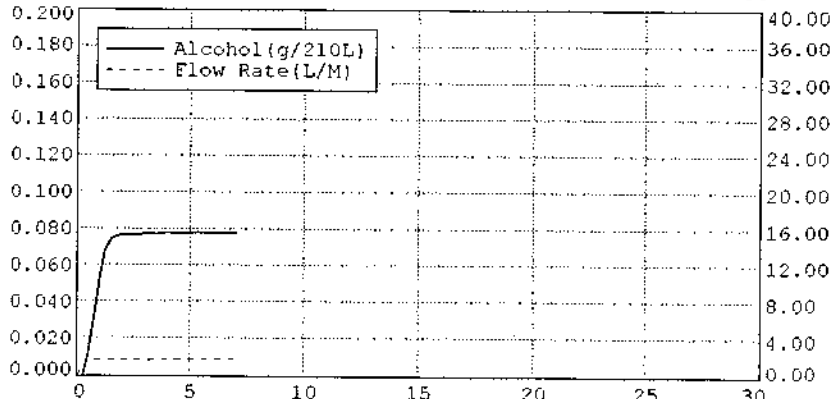
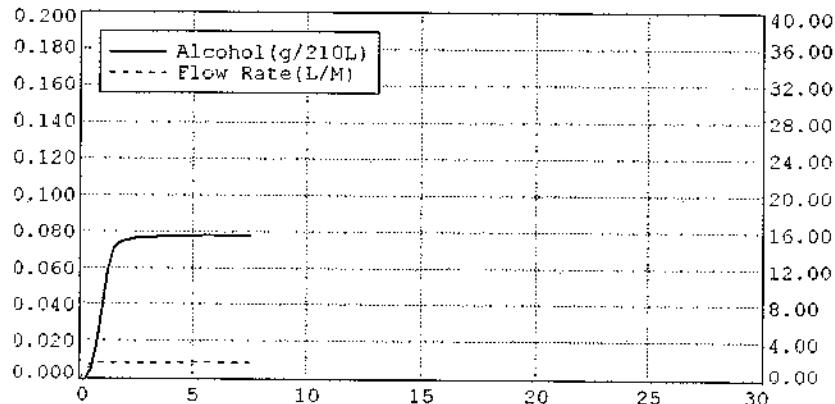
Date: 10/28/2015
 Time: 12:59:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.06: 0.078
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 199 psi

BLANK TEST	0.000	13:01
INTERNAL STANDARD	VERIFIED	13:01
EXTERNAL STANDARD	0.079	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.079	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.079	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.079	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.079	13:05
BLANK TEST	0.000	13:06

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dat: 100364

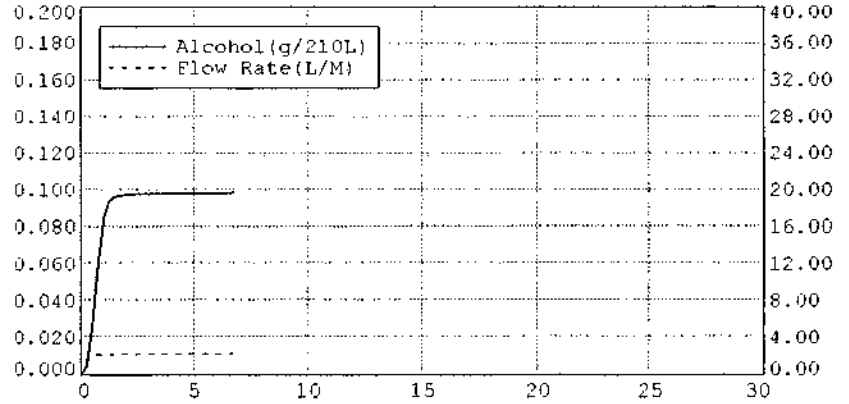
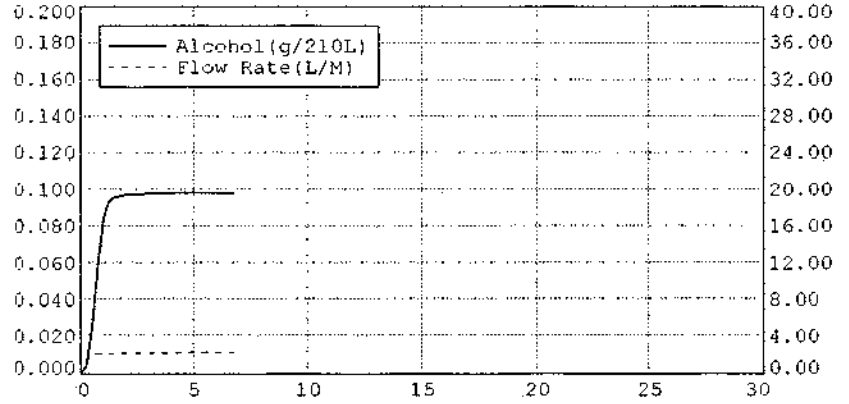
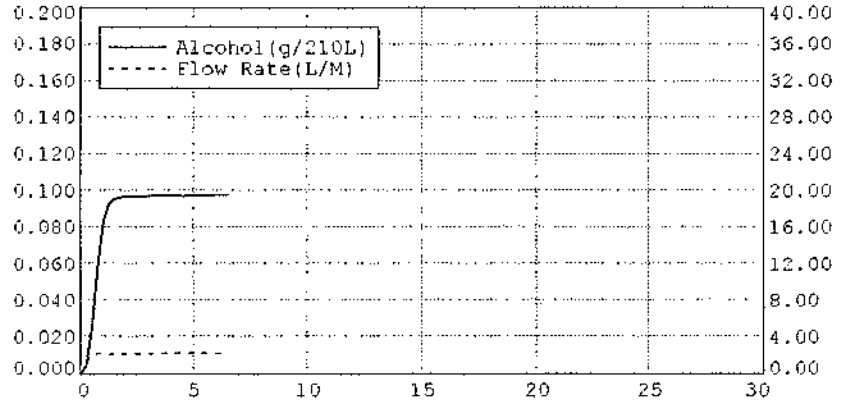
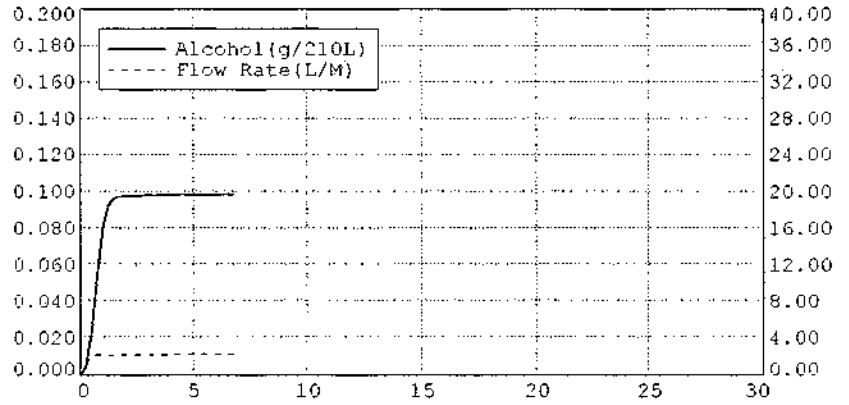
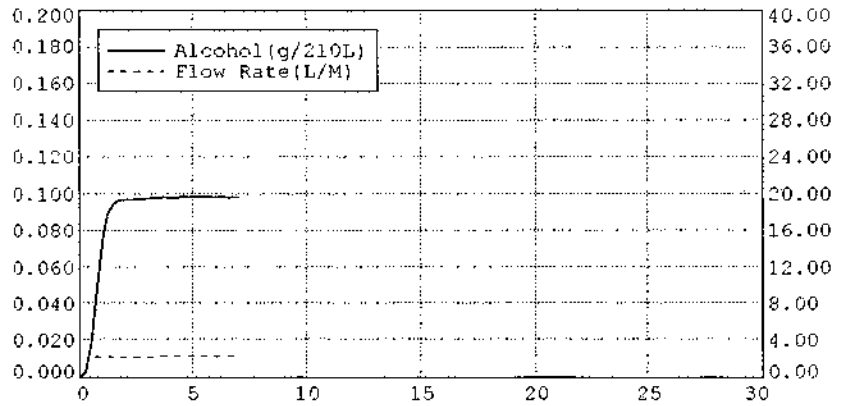
Date: 10/28/2015
 Time: 13:07:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.06: 0.097
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 853 psi

BLANK TEST	0.000	13:08
INTERNAL STANDARD	VERIFIED	13:08
EXTERNAL STANDARD	0.099	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.099	13:10
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.098	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.099	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.099	13:13
BLANK TEST	0.000	13:14

Average = 0.0988
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

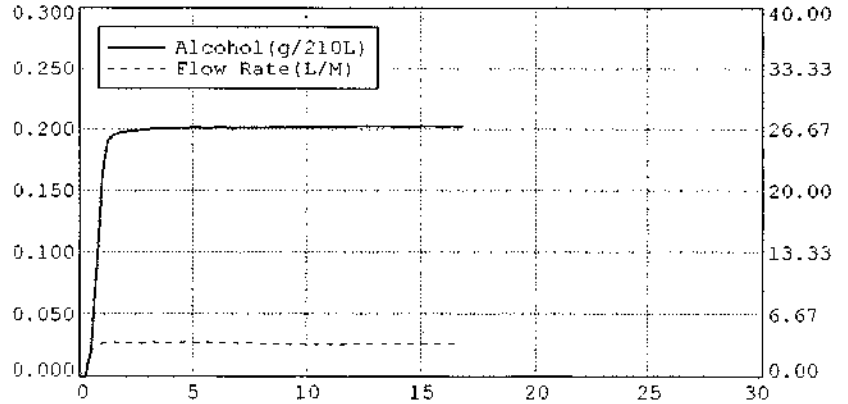
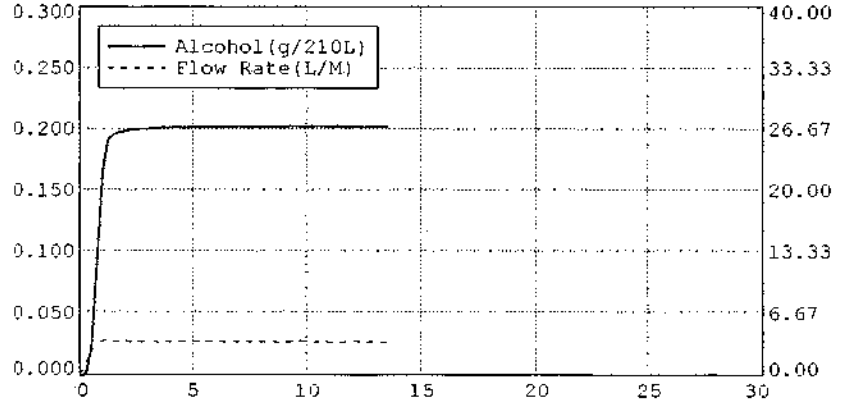
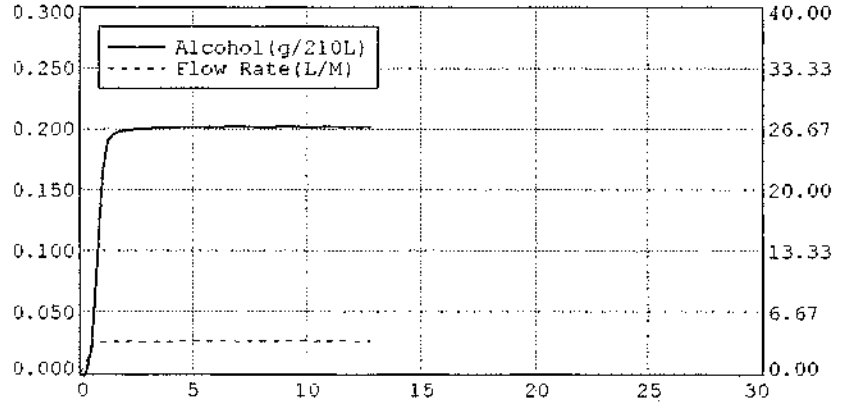
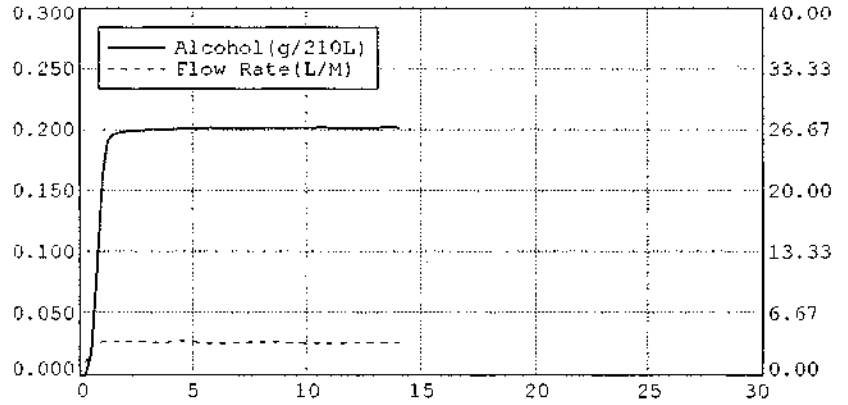
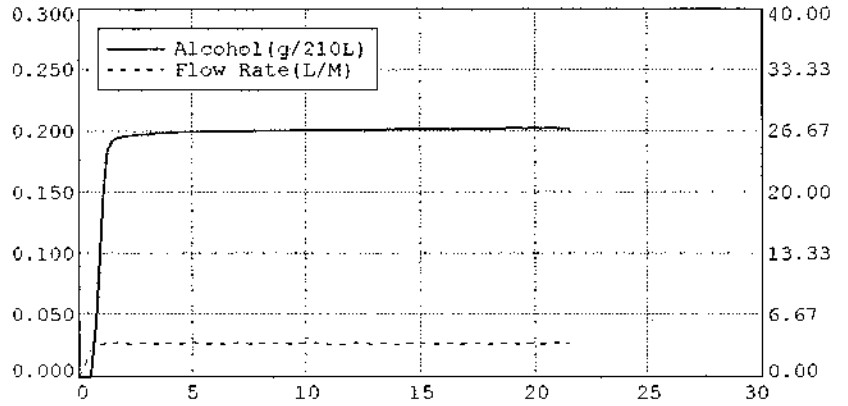
Alaska Department of Public Safety
 DATAMASTER dmt: 100364

Date: 10/28/2015
 Time: 13:17:32

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 15130
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	13:18
INTERNAL STANDARD	VERIFIED	13:18
EXTERNAL STANDARD	0.202	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.202	13:20
BLANK TEST	0.000	13:21
EXTERNAL STANDARD	0.202	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.202	13:23
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.202	13:24
BLANK TEST	0.000	13:25

Average = 0.2020
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

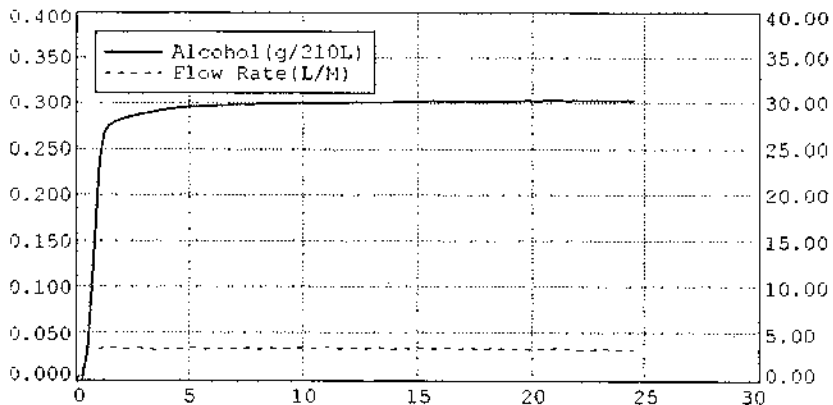
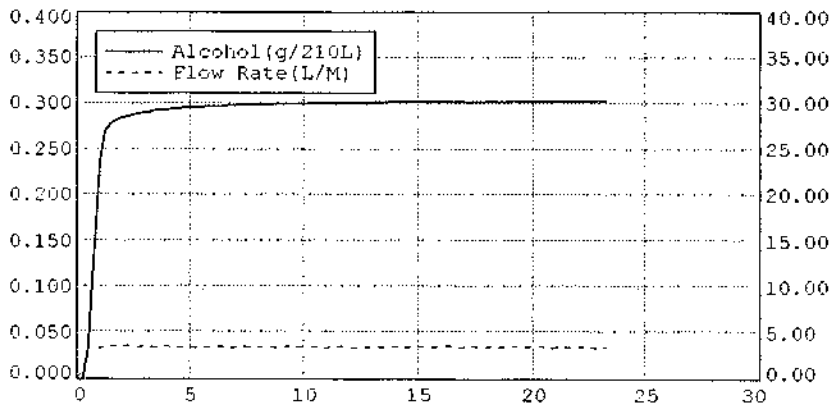
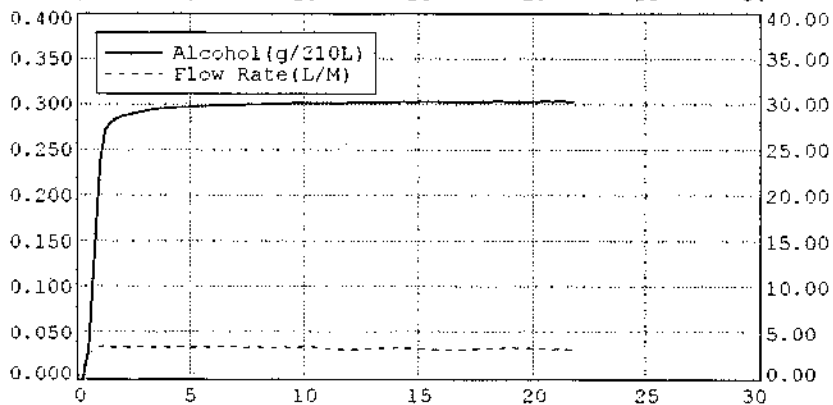
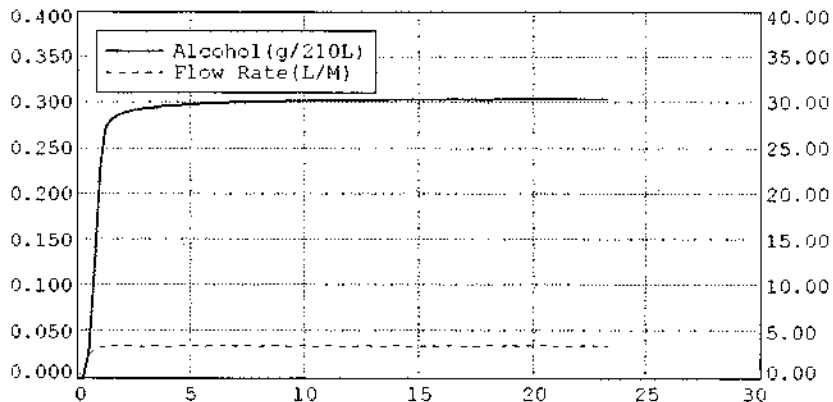
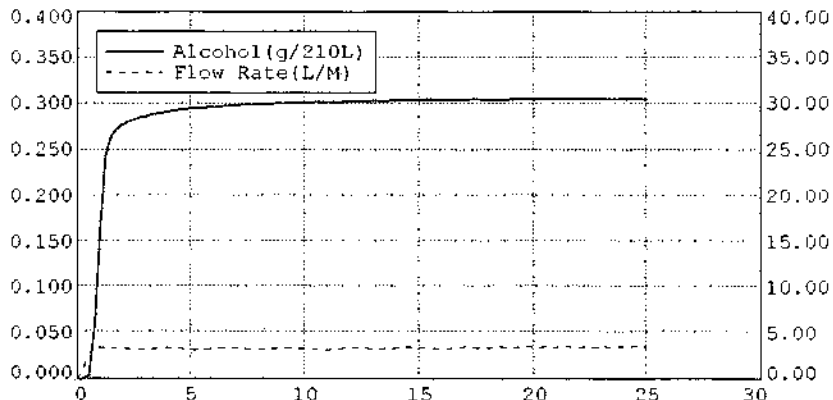
Alaska Department of Public Safety
 DATAMASTER dmt: 100364

Date: 10/28/2015
 Time: 13:26:13

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 14270
 EXPIRATION: 12/02/2016

BLANK TEST	0.000	13:27
INTERNAL STANDARD	VERIFIED	13:27
EXTERNAL STANDARD	0.303	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.303	13:29
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.302	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.301	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.302	13:33
BLANK TEST	0.000	13:34

Average = 0.3022
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 10/28/2015
Time: 15:46:15

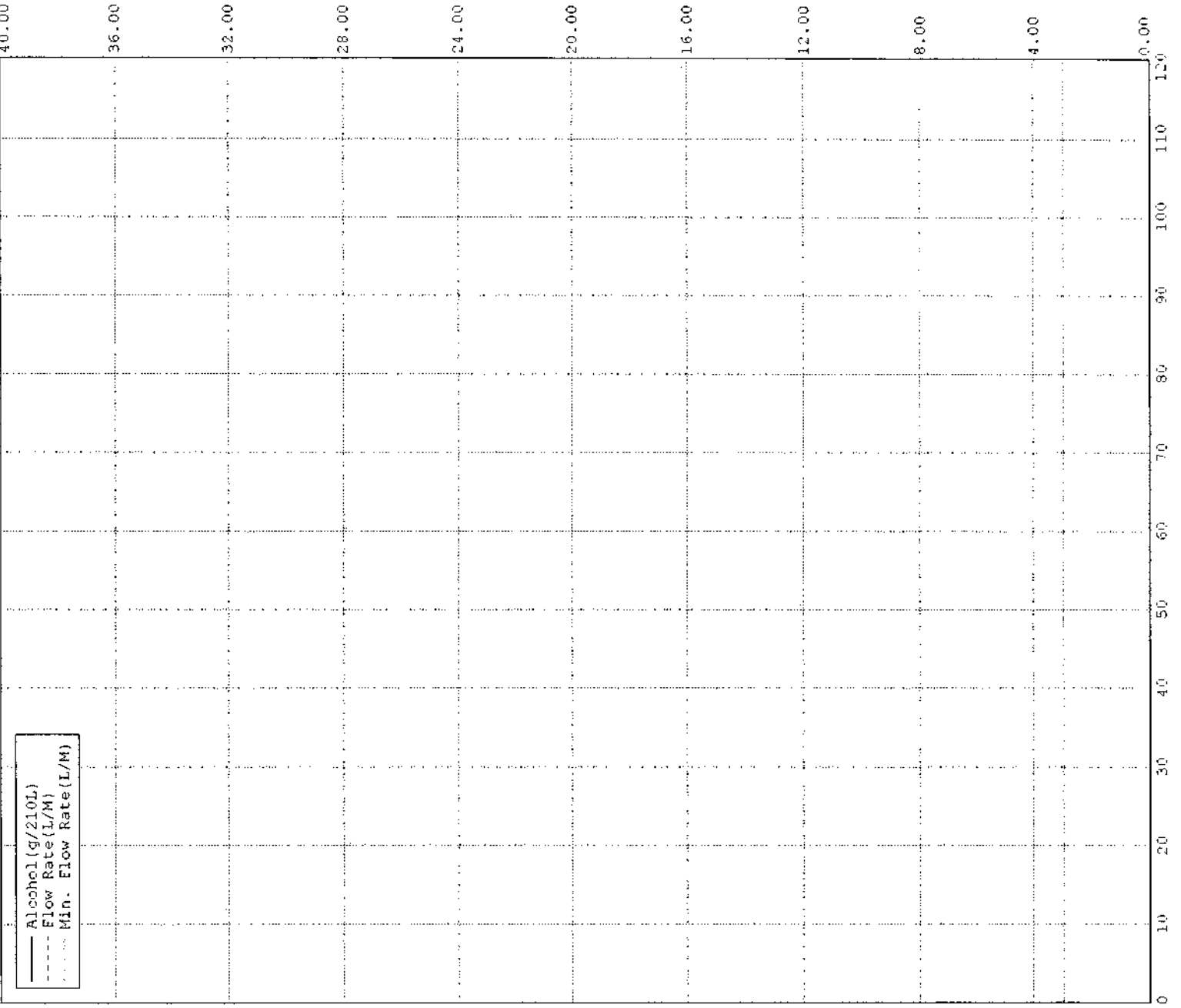
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

DEPT/AGENCY:
AAAI
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.06: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 15:47
BLANK TEST 0.000 15:47
INTERNAL STANDARD VERIFIED 15:47
EXTERNAL STANDARD 0.079 15:47
BLANK TEST 0.000 15:48
SUBJECT SAMPLE INCOMPLETE 15:50



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100364

Date: 11/02/2015
Time: 11:45:37

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

DEPT/AGENCY:

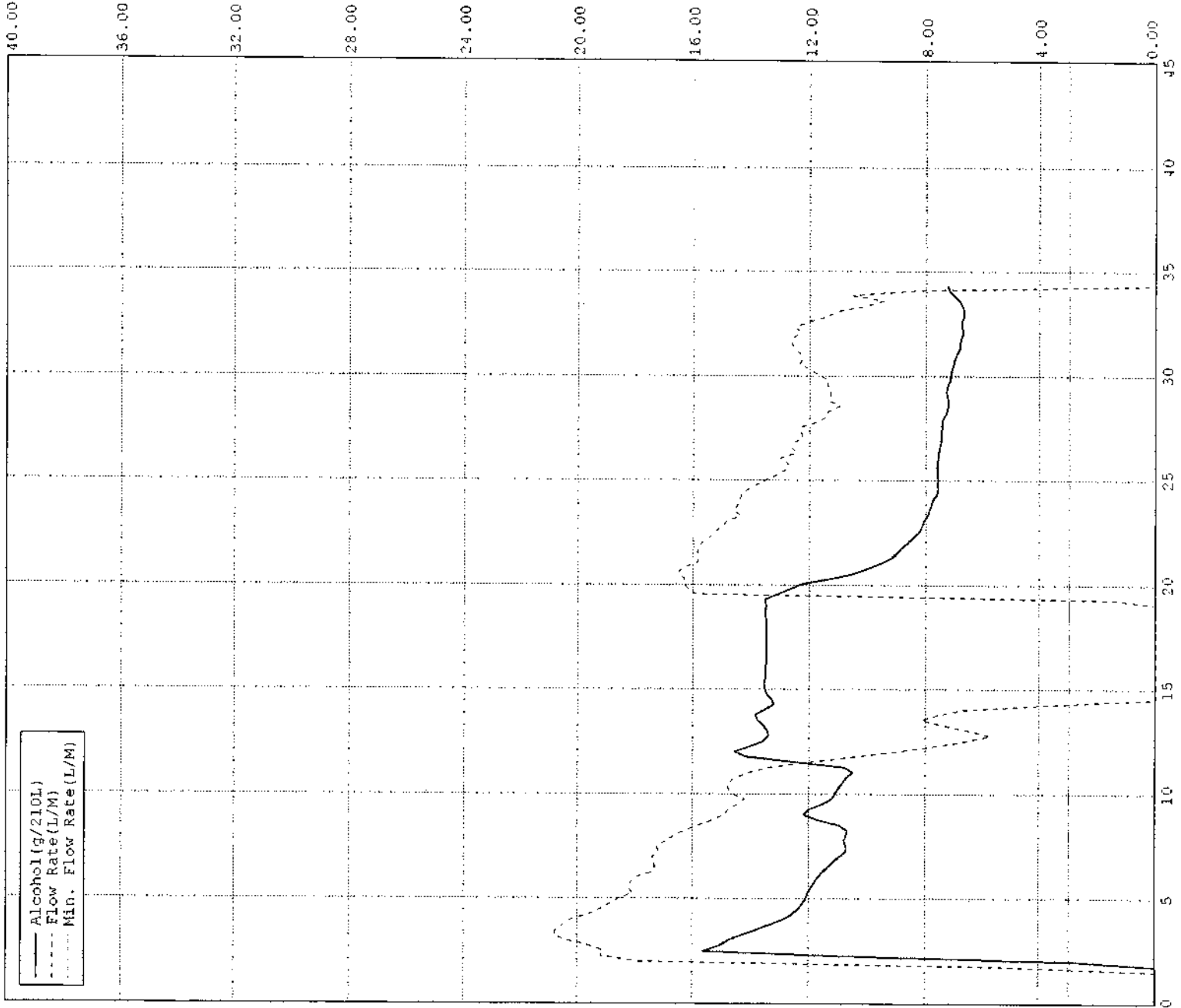
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 11:48
BLANK TEST 0.000 11:48
INTERNAL STANDARD VERIFIED 11:48
EXTERNAL STANDARD 0.080 11:48
BLANK TEST 0.000 11:49
SUBJECT SAMPLE INVALID 11:50

CAB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 11/02/2015
Time: 12:02:28

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

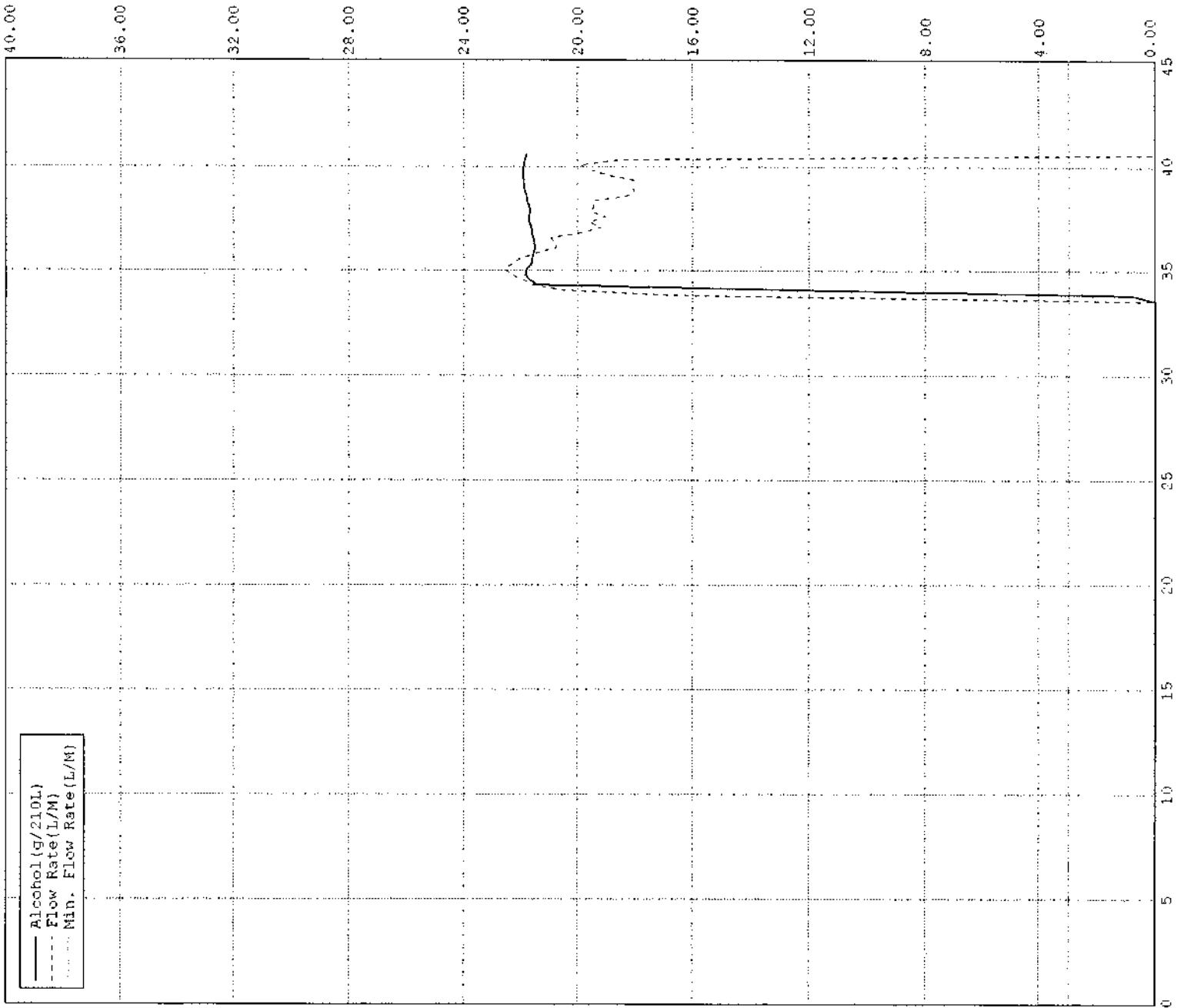
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:04
BLANK TEST	0.000	12:04
INTERNAL STANDARD	VERIFIED	12:04
Xq = 0.098 (0.27%)		
EXTERNAL STANDARD	0.080	12:04
X[1] = 0.0803 (-0.0005) (0.0031)		
BLANK TEST	0.000	12:05
SUBJECT SAMPLE	XXX	12:06
X[1] = 0.1091 (-0.0172) (0.0028)		

Interference Detected

CB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 11/02/2015
Time: 12:09:44

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

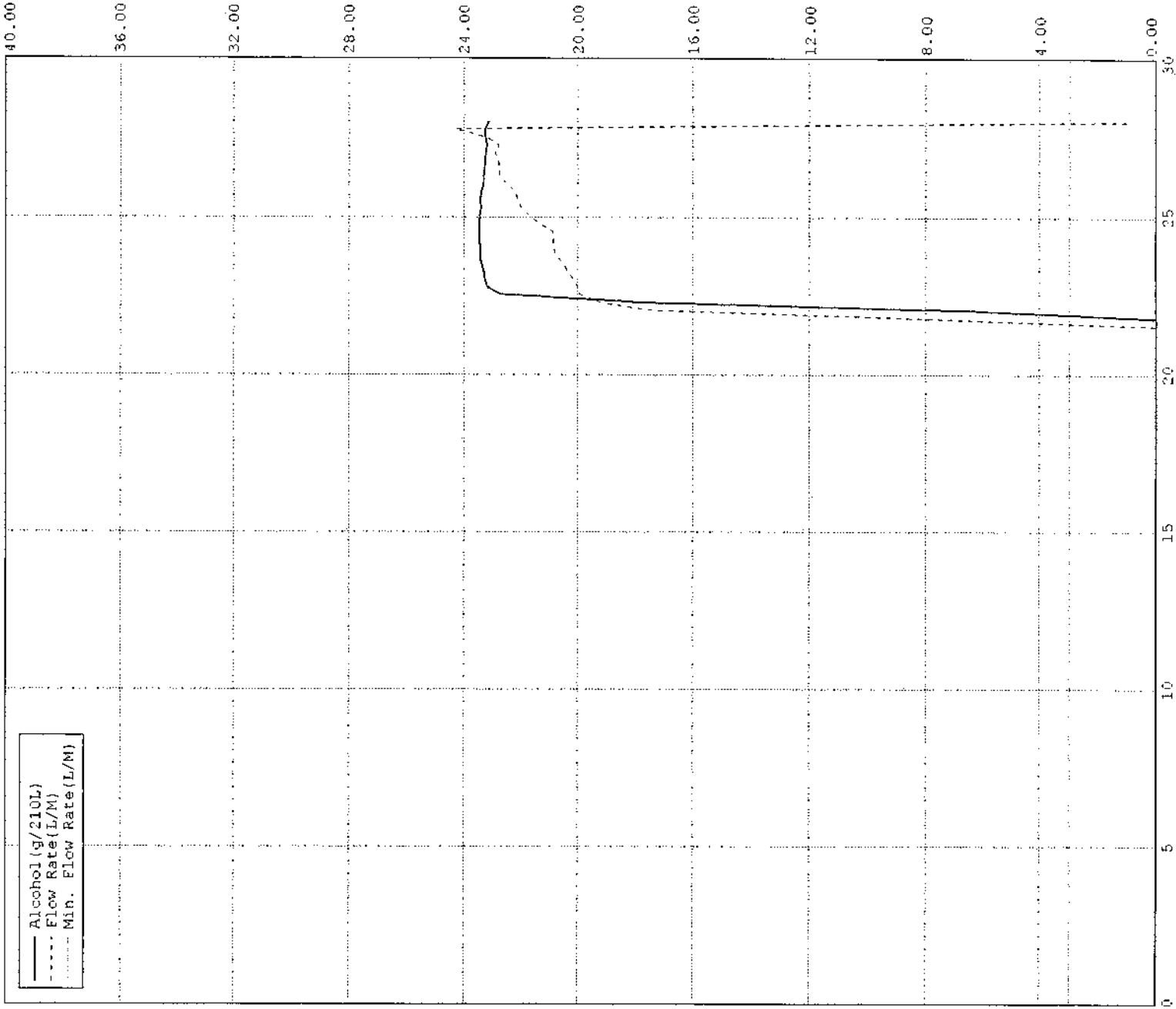
DEPT/AGENCY:
AAAI
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:10
BLANK TEST	0.000	12:10
INTERNAL STANDARD	VERIFIED	12:10
Xq = 0.099 (0.89%)		
EXTERNAL STANDARD	0.081	12:11
X[1] = 0.0808 (-0.0004) (0.0033)		
BLANK TEST	0.000	12:12
SUBJECT SAMPLE	XXX	12:12
X[1] = 0.1154 (-0.0248) (0.0015)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 11/02/2015
Time: 12:15:28

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEG

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

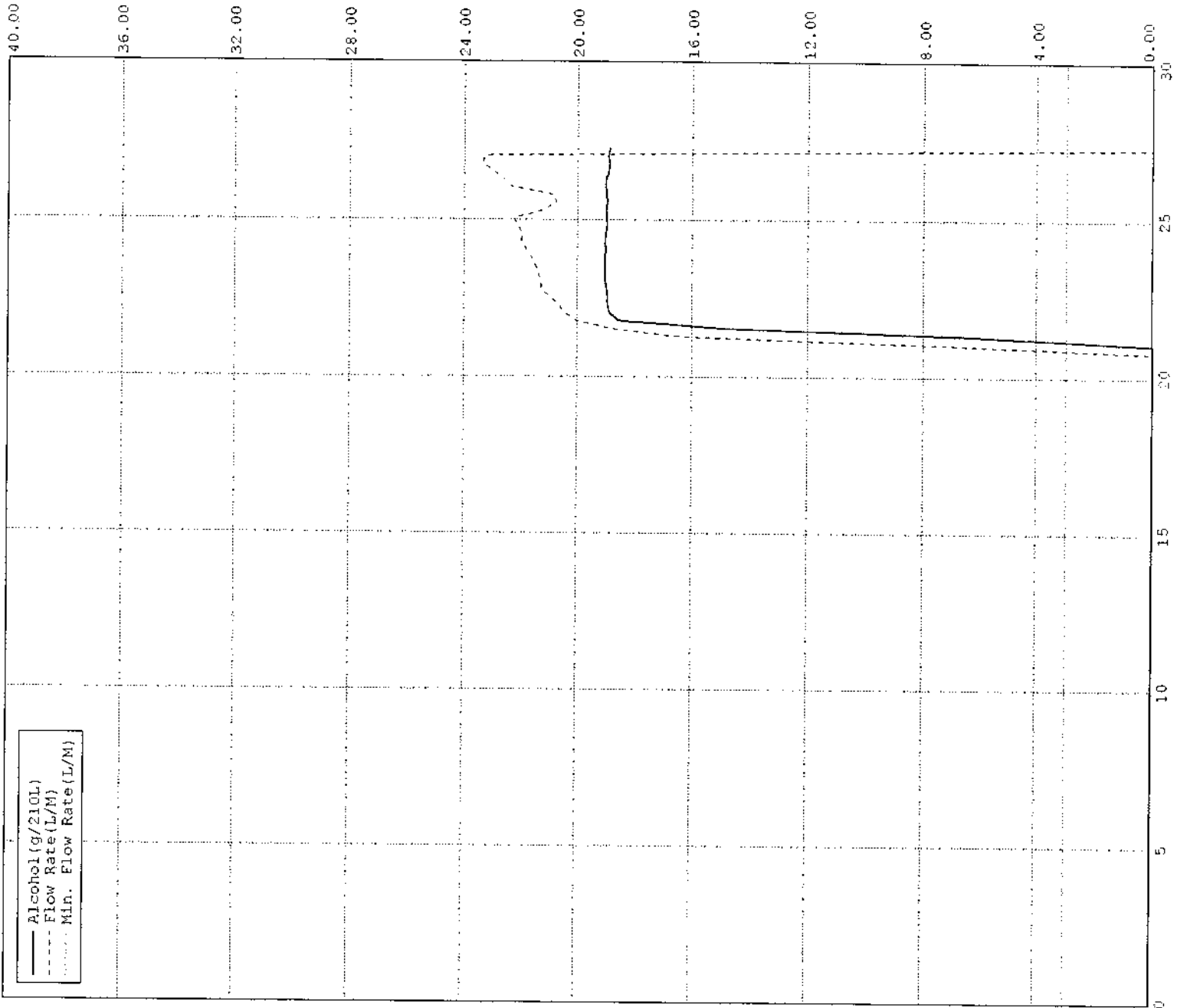
NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:19
BLANK TEST	0.000	12:19
INTERNAL STANDARD	VERIFIED	12:19
Xq = 0.099 (0.54%)		
EXTERNAL STANDARD	0.081	12:19
X[1] = 0.0808 (-0.0004) (0.0027)		
BLANK TEST	0.000	12:20
SUBJECT SAMPLE (Vol=2.17L)	0.094	12:21
X[1] = 0.0944 (0.0005) (0.0012)		
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.080	12:22
X[1] = 0.0804 (-0.0009) (0.0025)		
BLANK TEST	0.000	12:23

Filter 2 arg = -0.0006

Filter 3 arg = 0.0029

CRB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 11/02/2015
Time: 12:26:03

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:

AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

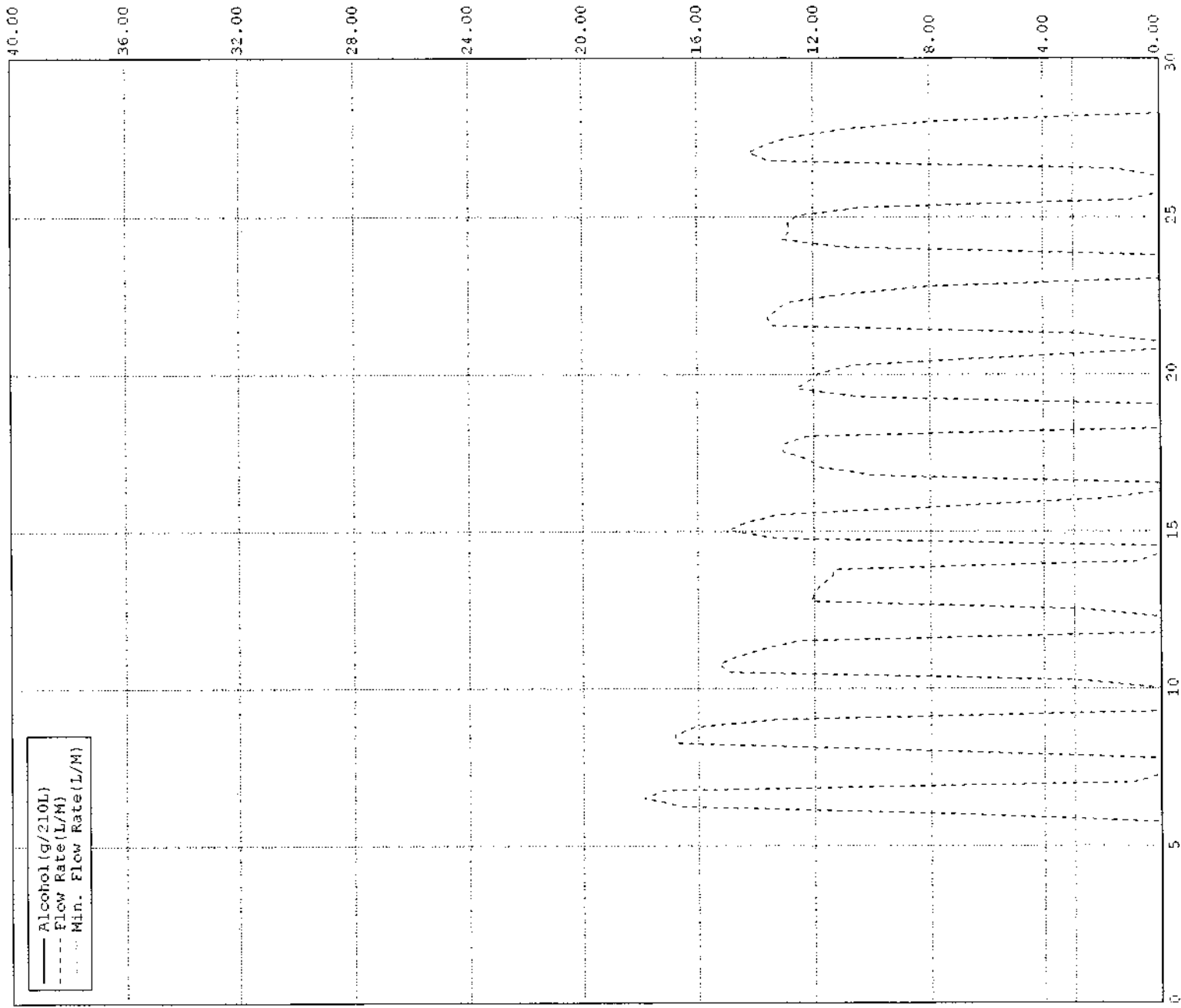
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:27
BLANK TEST	0.000	12:27
INTERNAL STANDARD	VERIFIED	12:27
EXTERNAL STANDARD	0.081	12:27
BLANK TEST	0.000	12:28
SUBJECT SAMPLE	XXX	12:28

Maximum Attempts Exceeded

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 11/02/2015
Time: 12:30:37

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

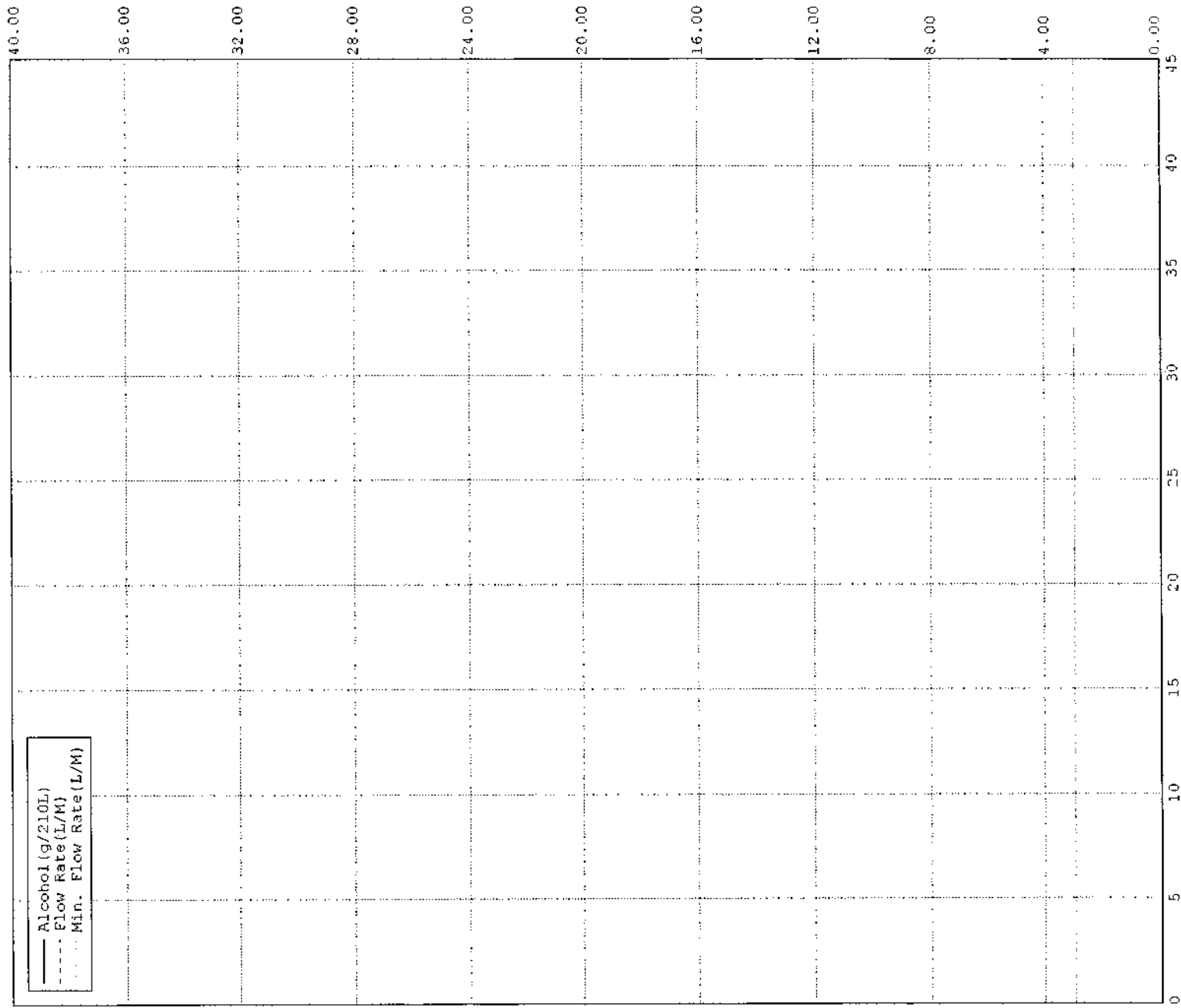
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 12:33
BLANK TEST 0.000 12:33
INTERNAL STANDARD VERIFIED 12:33
EXTERNAL STANDARD 0.081 12:33
BLANK TEST 0.000 12:34

RFI DETECTED

CRB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100364

Date: 11/02/2015
Time: 13:53:03

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.74: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	13:54
BLANK TEST	0.000	13:54
INTERNAL STANDARD	VERIFIED	13:54
EXTERNAL STANDARD	0.081	13:54
BLANK TEST	0.000	13:55
SUBJECT SAMPLE (Vol=2.09L)	0.000	13:56
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.081	13:57
BLANK TEST	0.000	13:58

