

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 100374 Analyst Colleen O'Bryen Start Date 1/14/16

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 TLMO Lot 02915020A2 Exp 3/5/17
- ii. 0.040g/210L Mnf TLMO Lot 02915040A3 Exp 3/5/17
- iii. 0.080g/210L Mnf TLMO Lot 01315080A3 Exp 2/5/17
- iv. 0.100g/210L Mnf TLMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/11/17
 - 1. Simulator S/N DR6267 Date Calibrated 1/20/2015
- vi. 0.300g/210L Mnf Guth Lot 15170 Exp 7/20/17
 - 1. Simulator S/N DR4162 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 DR4163 Date Calibrated 1/19/15
- ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N SD1176 Date Calibrated 1/20/15
- iii. Negative Control - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DR4178 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 1/19/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 01/14/2016
Time: 08:49:06

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.6°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.59 V PASSED
(0.95 V - 2.23 V)
Cooler Voltage = 1.43 V PASSED
(0.86 V - 2.00 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 532 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.078 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 0.66% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100374

Date: 01/14/2016
Time: 9:45 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 46.7°C

Current Barometer 29.5 in
Volume (Ltr) 1.50

Settings
Lamp: 1.59 V
Bias: 80 V
Cooler: 1.53 V
Chopper: 532 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.079 V

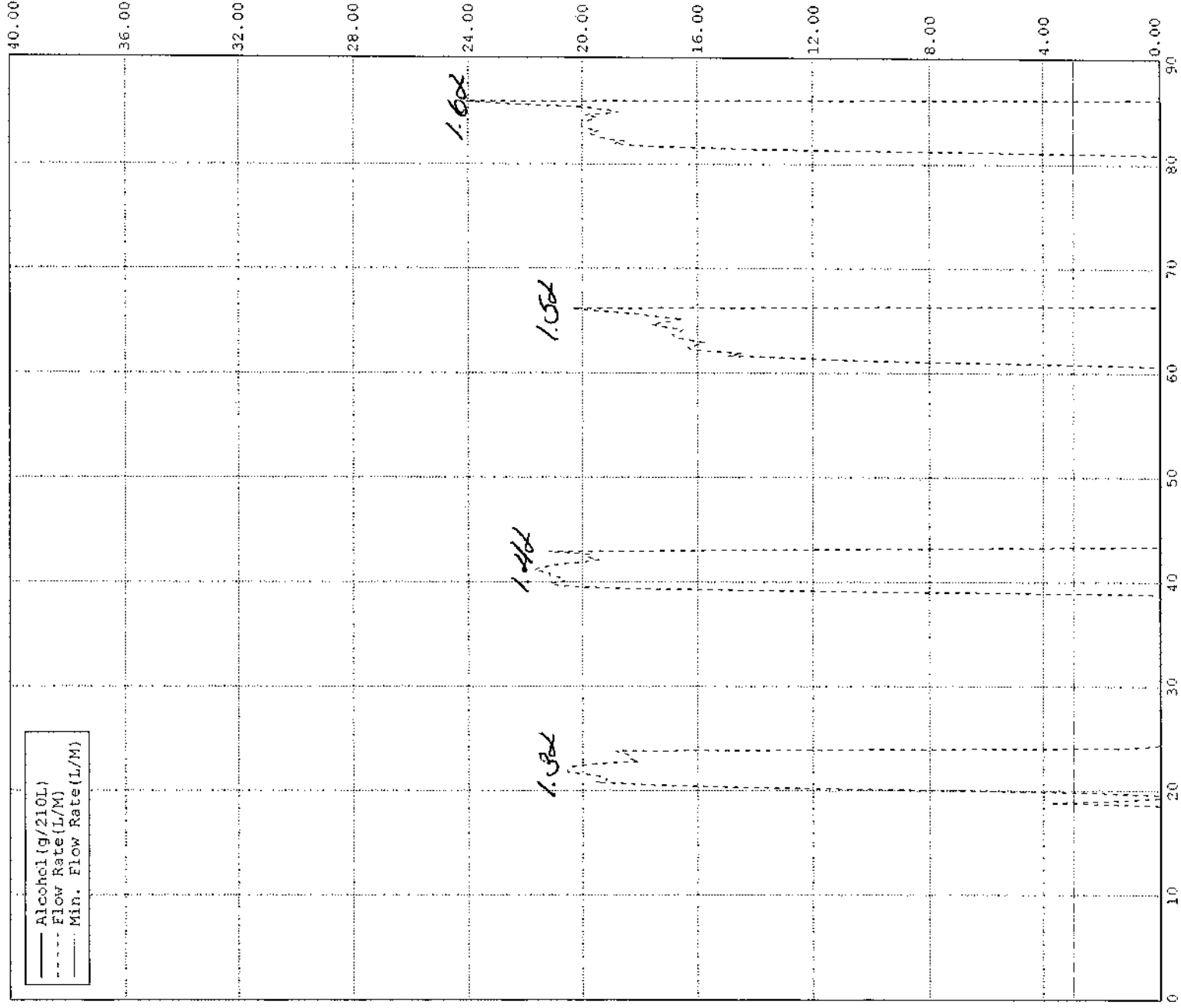
CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 08/12/2015
Time: 13:25:02

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.953026 0.800 <= CAL < 1.200
b1 = 0.0005 0.0000 <= b1 < 0.0040
b2 = 0.0070 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0925 0.0500 <= Xq < 0.2000
a21 = 1.201969 1.050 <= a21 < 1.300
a31 = 0.393302 0.300 <= a31 < 0.800



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100374

 Date: 01/14/2016
 Time: 09:46:16

SUBJECT NAME:
 TEST TEST
 LICENSE #: VOLUME TEST

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

DEPT/AGENCY:
 AAAA

CASE/REPORT: 16-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.54: 0.079
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:47
BLANK TEST	0.000	09:47
INTERNAL STANDARD	VERIFIED	09:47
EXTERNAL STANDARD	0.077	09:47
BLANK TEST	0.000	09:48
SUBJECT SAMPLE (Vol=1.58L)	0.000	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.077	09:51
BLANK TEST	0.000	09:52

(CB)

LINEARITY CHECK

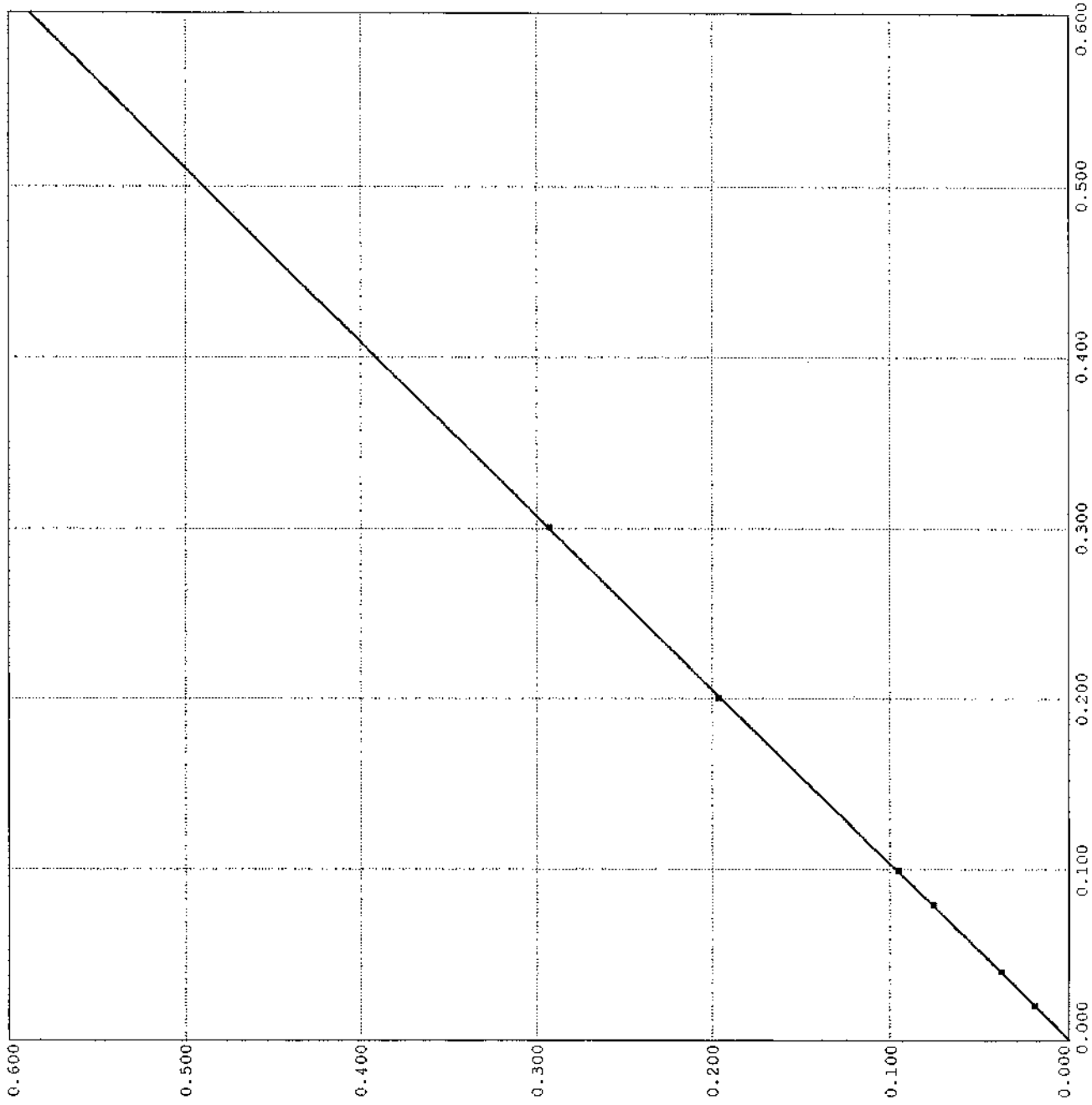
Alaska Department of Public Safety
 DATAMASTER dmt: 100374

Date: 01/14/2016
 Time: 10:38:33

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.040	0.0388	0.0004
0.079	0.0768	0.0004
0.099	0.0962	0.0004
0.200	0.1974	0.0005
0.300	0.2936	0.0005

SLOPE = 0.981686
 R² = 0.999943



OB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

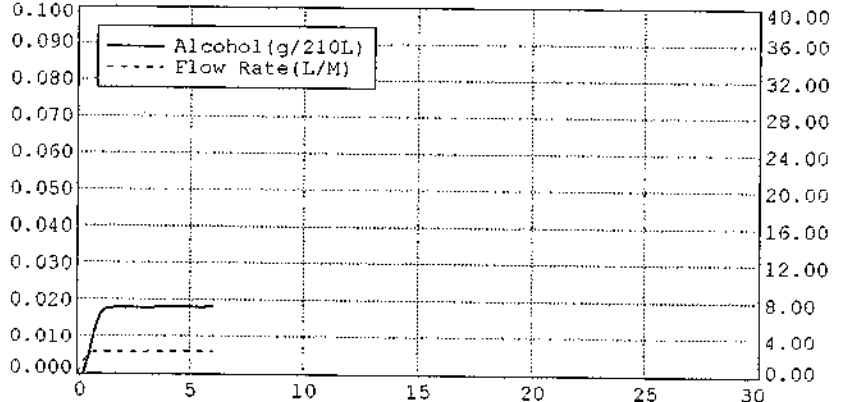
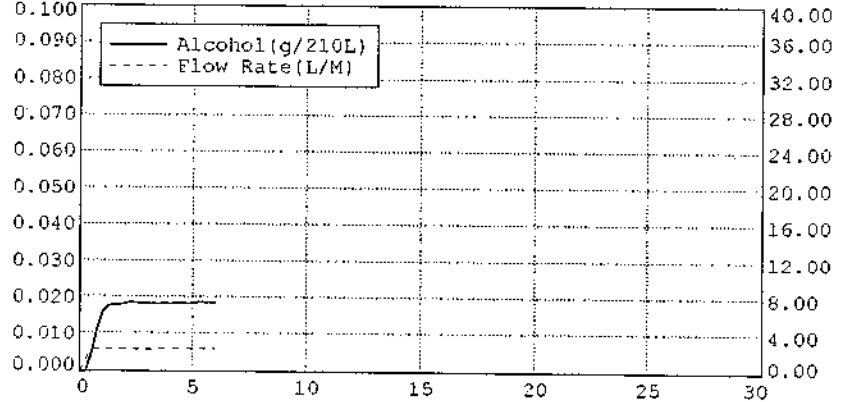
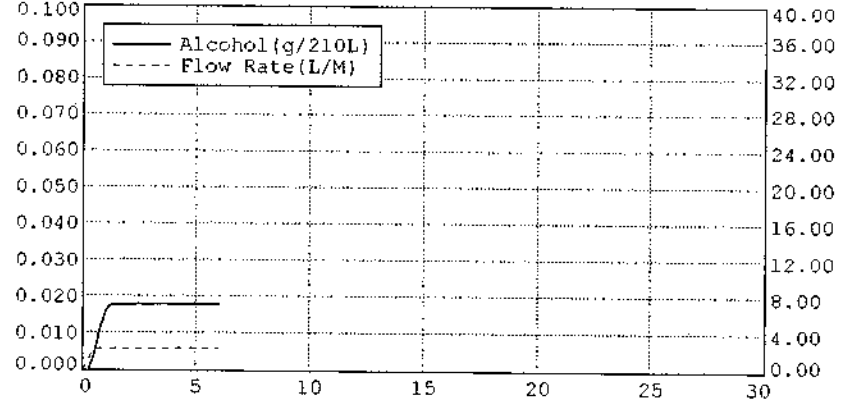
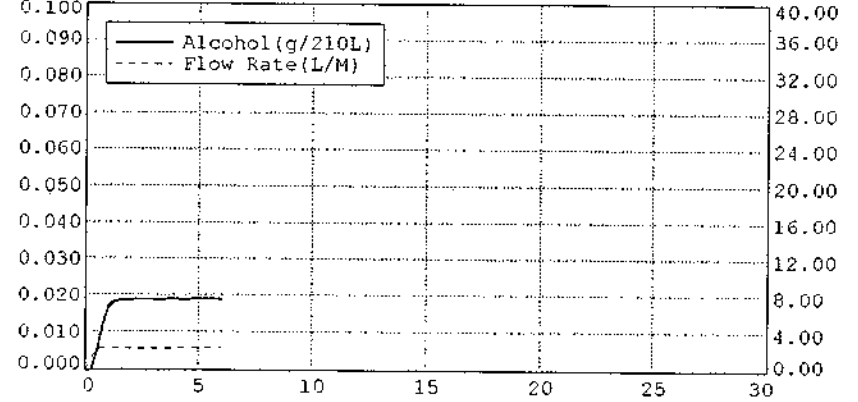
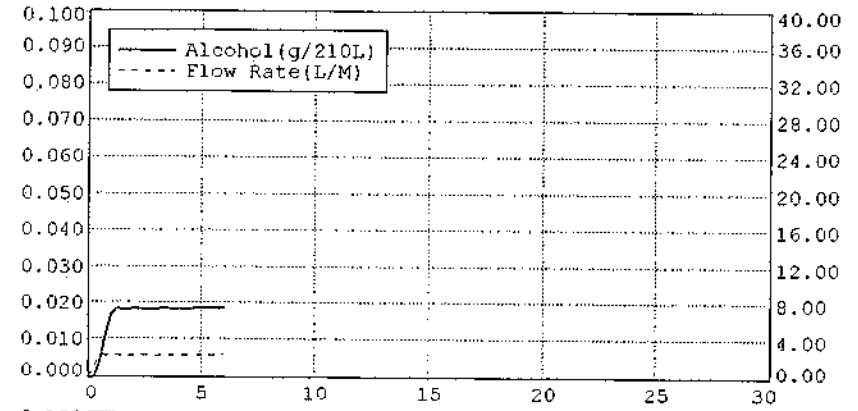
Date: 01/14/2016
 Time: 10:38:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.57: 0.020
 LOT #: ~~0215020A2~~ *0215020A2*
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 972 psi

BLANK TEST	0.000	10:41
INTERNAL STANDARD	VERIFIED	10:41
EXTERNAL STANDARD	0.020	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.020	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.019	10:43
BLANK TEST	0.000	10:44
EXTERNAL STANDARD	0.020	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.020	10:45
BLANK TEST	0.000	10:46

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

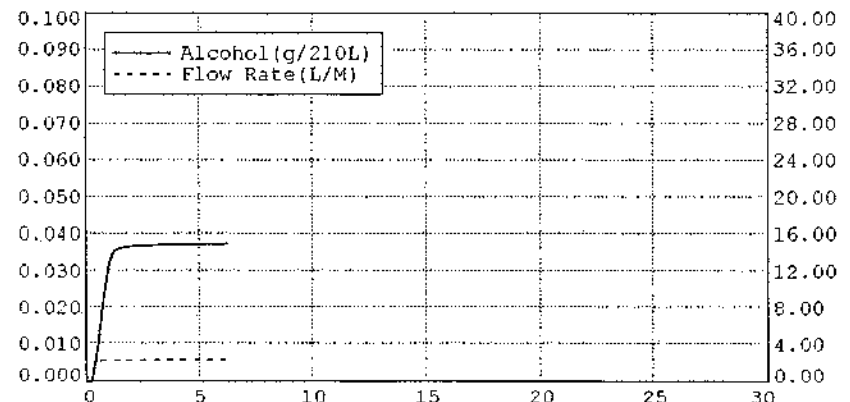
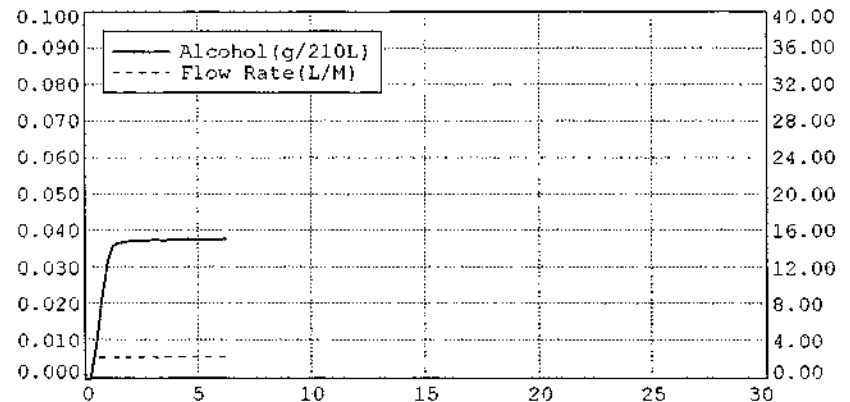
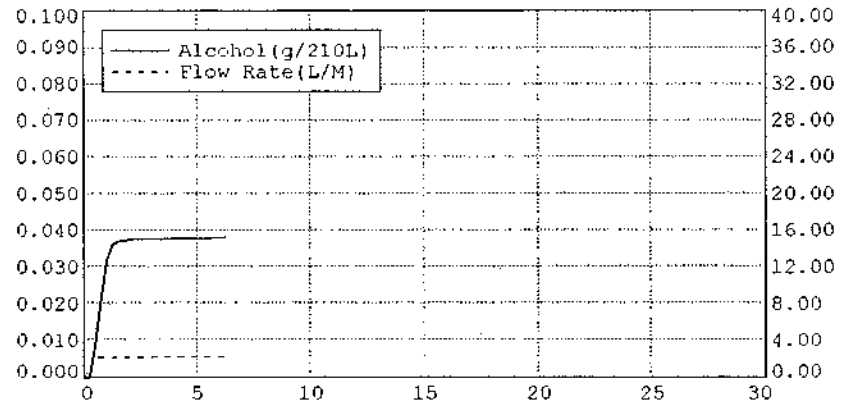
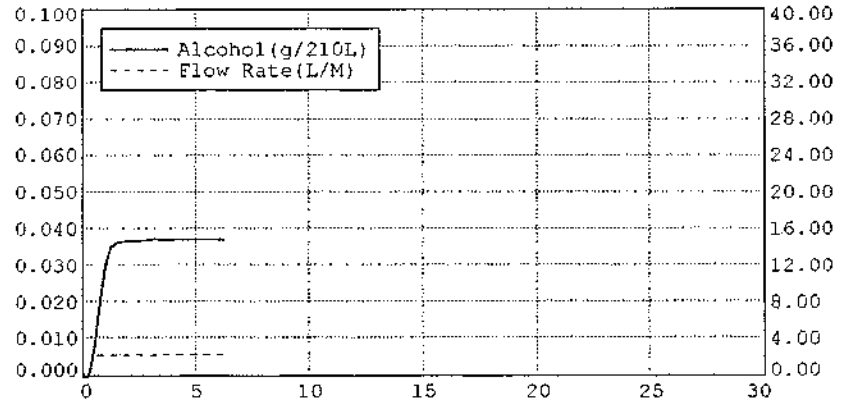
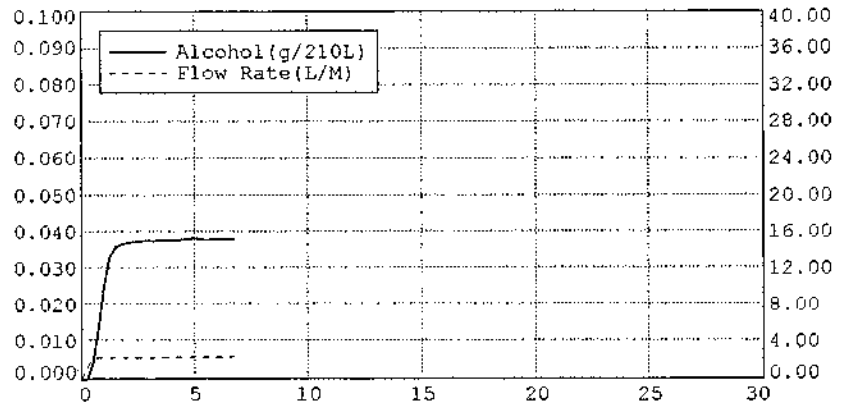
Alaska Department of Public Safety
 DATAMASTER dmt: 100374

Date: 01/14/2016
 Time: 10:47:16

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.040
 TARGET AT 29.58: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 585 psi

BLANK TEST	0.000	10:48
INTERNAL STANDARD	VERIFIED	10:48
EXTERNAL STANDARD	0.039	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.039	10:50
BLANK TEST	0.000	10:51
EXTERNAL STANDARD	0.039	10:51
BLANK TEST	0.000	10:52
EXTERNAL STANDARD	0.039	10:52
BLANK TEST	0.000	10:53
EXTERNAL STANDARD	0.038	10:53
BLANK TEST	0.000	10:54

Average = 0.0388
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

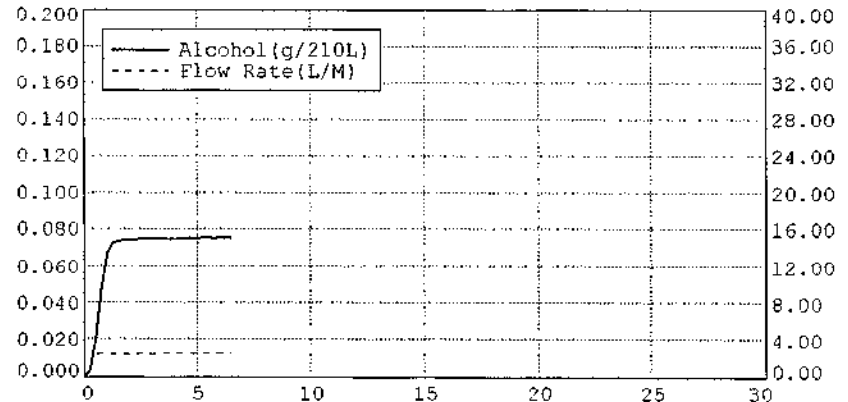
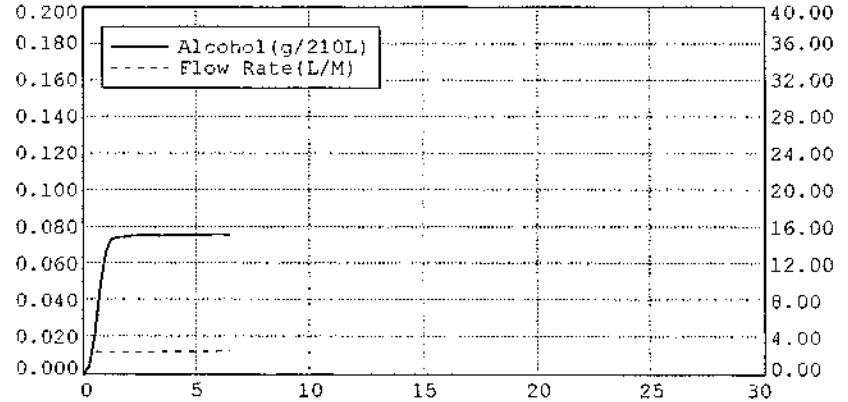
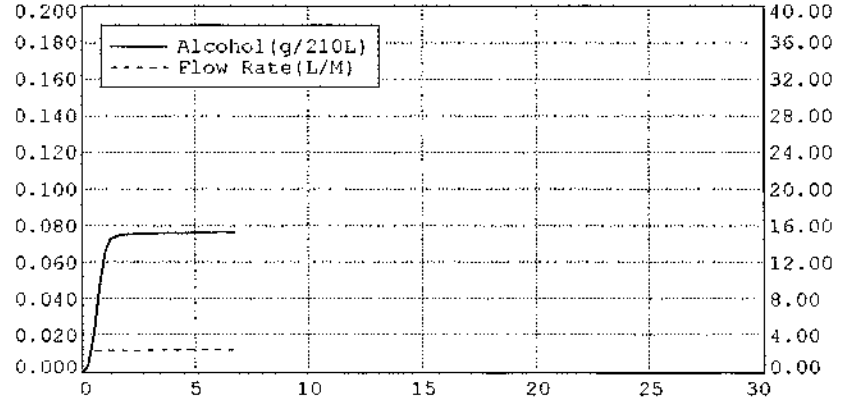
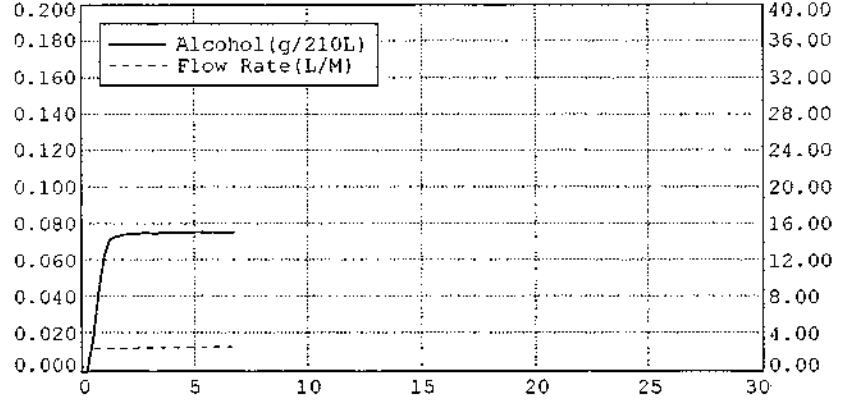
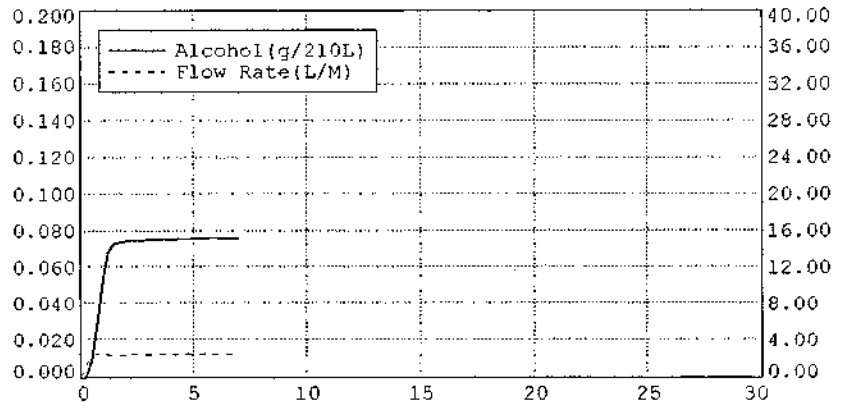
Date: 01/14/2016
 Time: 10:55:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.58: 0.079
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 951 psi

BLANK TEST	0.000	10:58
INTERNAL STANDARD	VERIFIED	10:58
EXTERNAL STANDARD	0.077	10:59
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.076	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.077	11:01
BLANK TEST	0.000	11:02
EXTERNAL STANDARD	0.077	11:02
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.077	11:03
BLANK TEST	0.000	11:04

Average = 0.0768
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

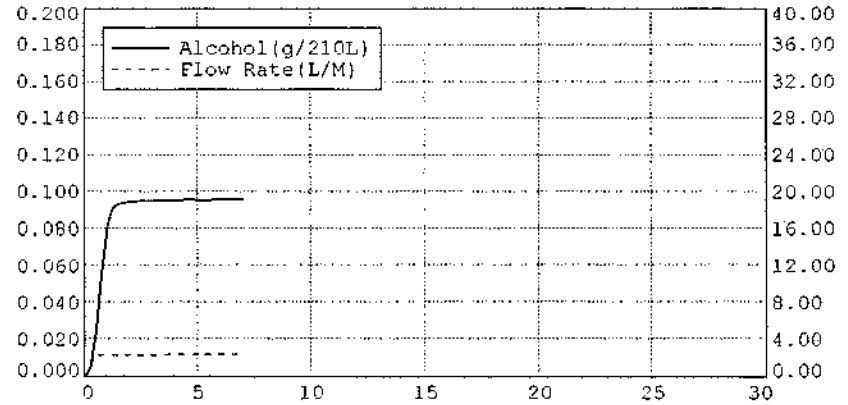
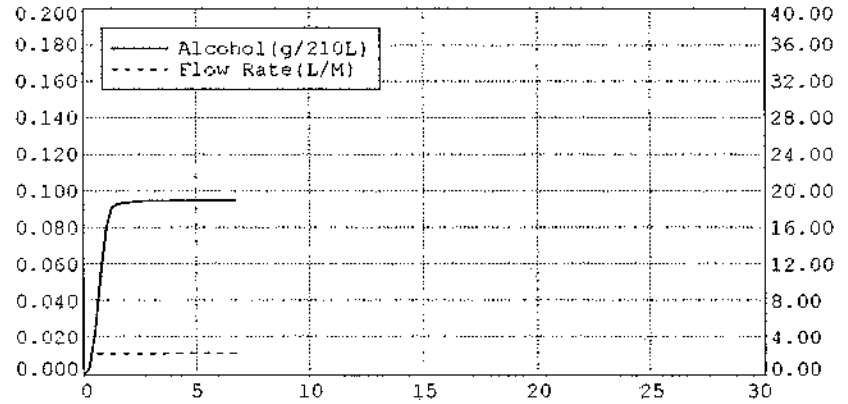
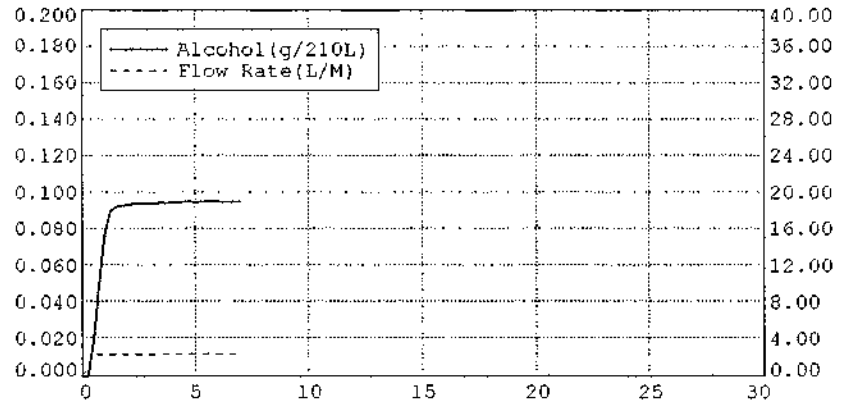
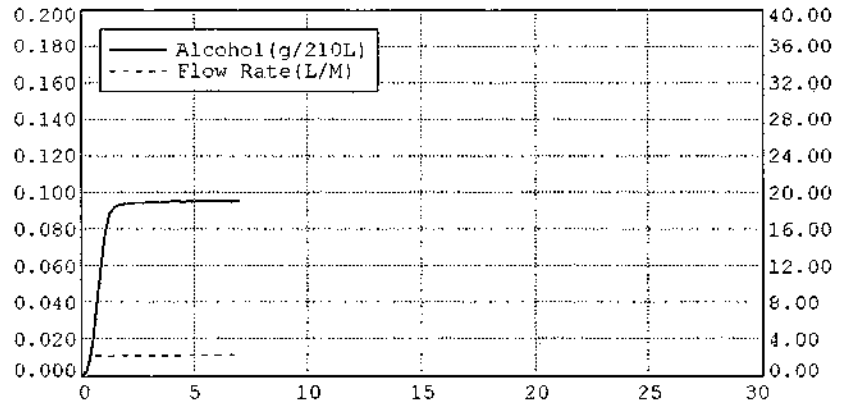
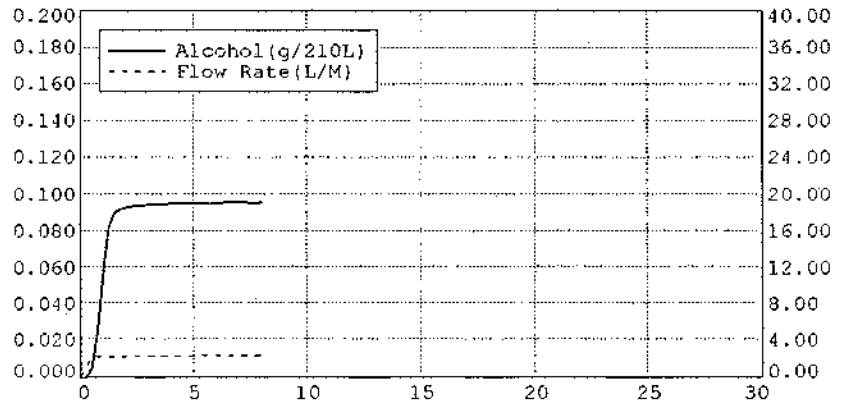
Date: 01/14/2016
 Time: 14:17:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.61: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 563 psi

BLANK TEST	0.000	14:19
INTERNAL STANDARD	VERIFIED	14:19
EXTERNAL STANDARD	0.096	14:19
BLANK TEST	0.000	14:20
EXTERNAL STANDARD	0.096	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.096	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.096	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.097	14:23
BLANK TEST	0.000	14:24

Average = 0.0962
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

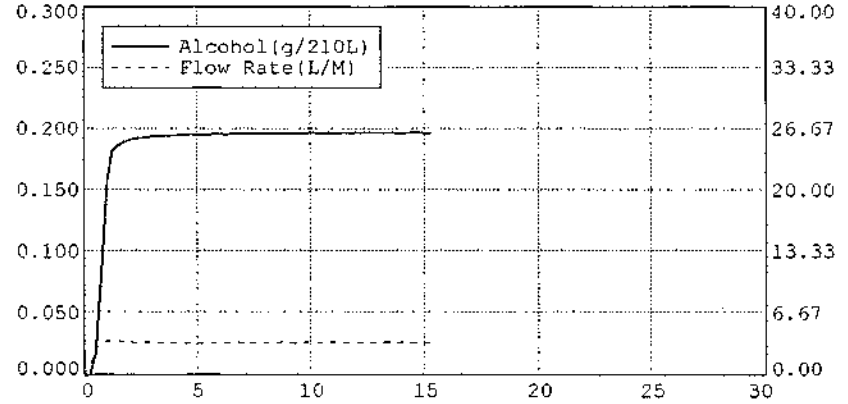
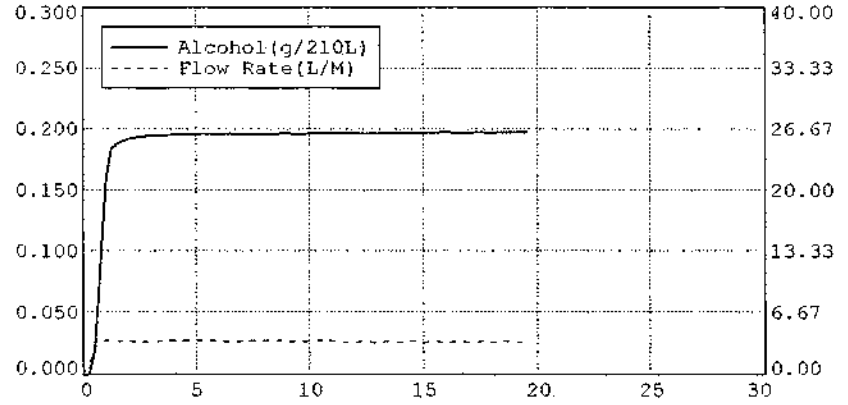
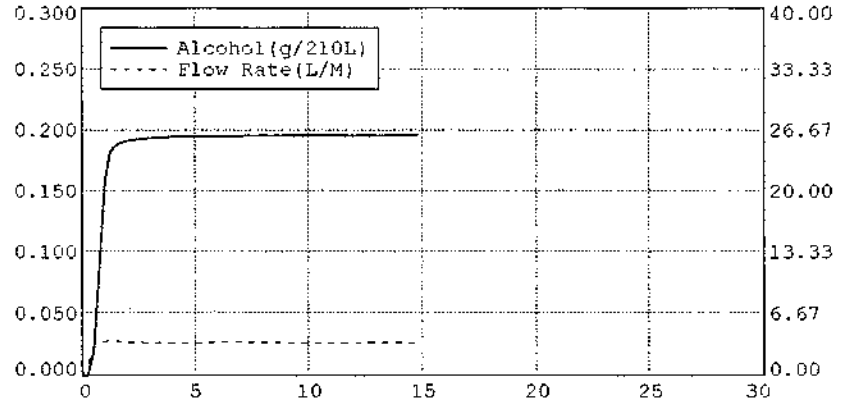
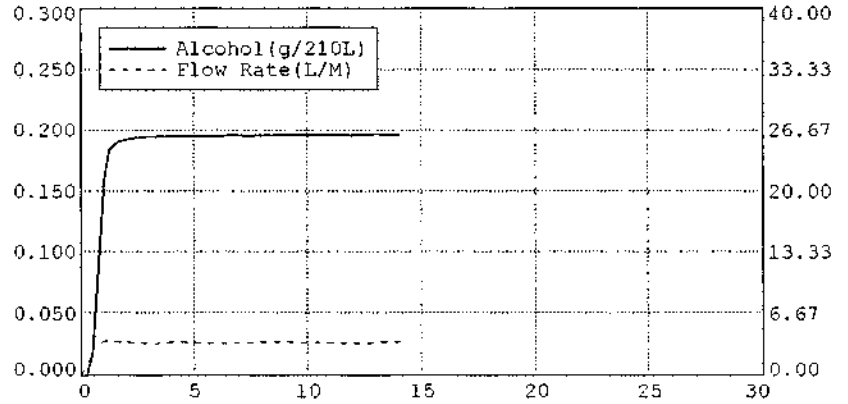
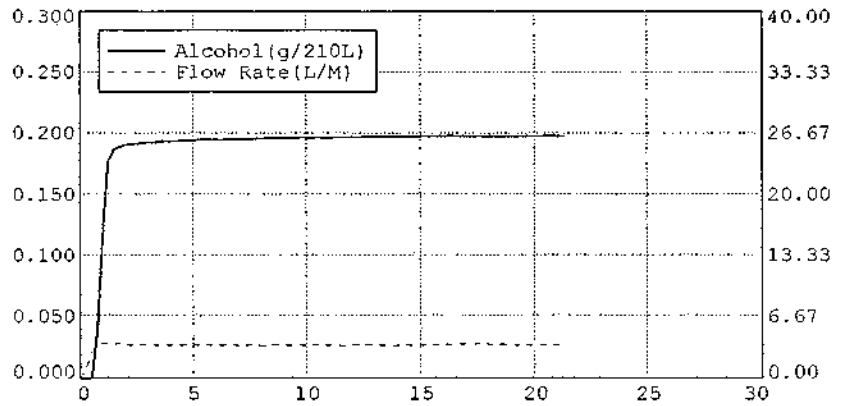
Alaska Department of Public Safety
 DATAMASTER dmt: 100374

Date: 01/14/2016
 Time: 14:25:11

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

BLANK TEST	0.000	14:26
INTERNAL STANDARD	VERIFIED	14:26
EXTERNAL STANDARD	0.198	14:27
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.197	14:28
BLANK TEST	0.000	14:29
EXTERNAL STANDARD	0.197	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.198	14:30
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.197	14:32
BLANK TEST	0.000	14:33

Average = 0.1974
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

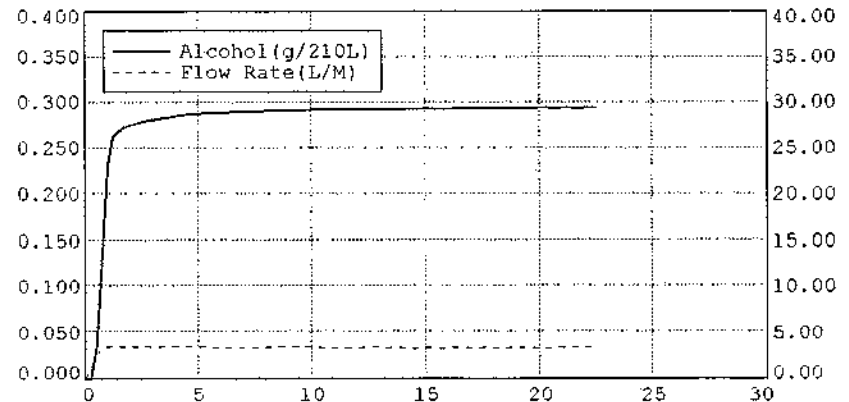
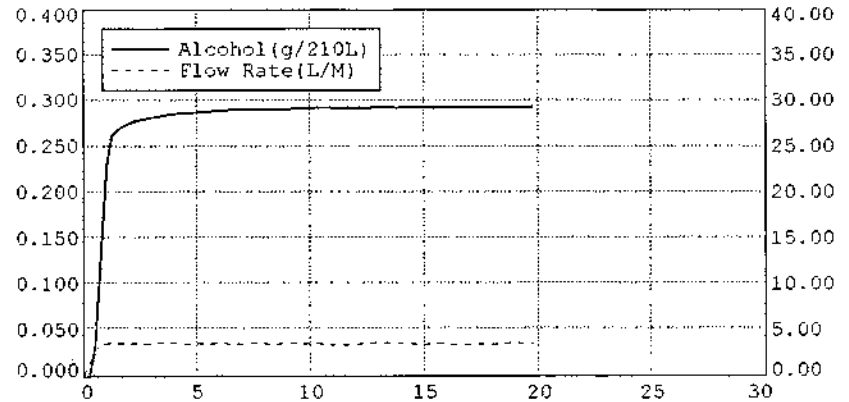
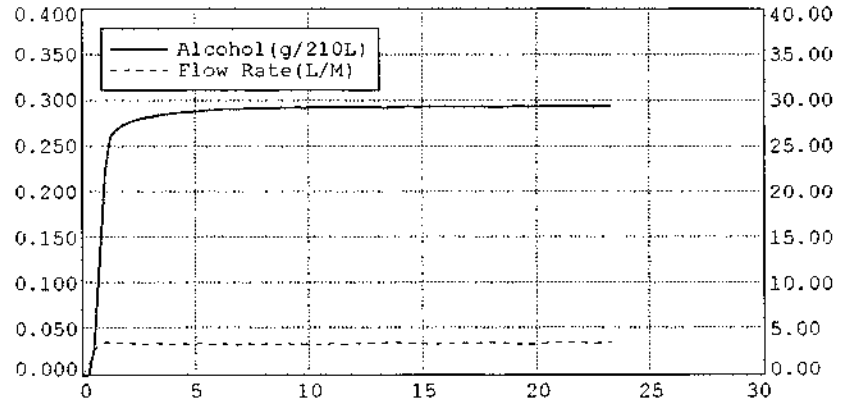
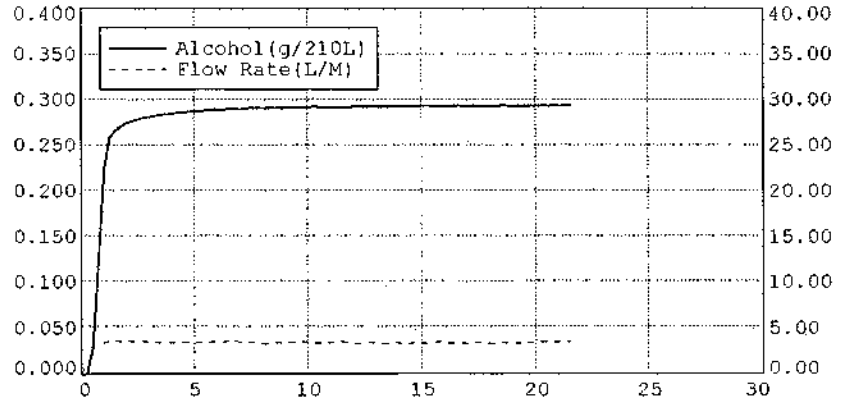
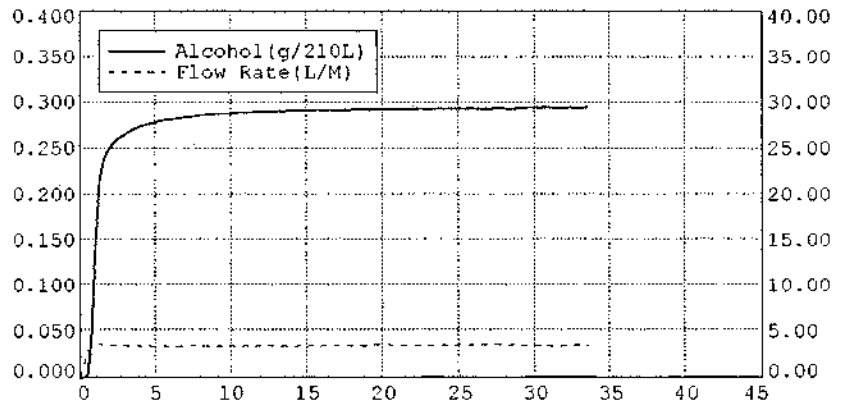
Date: 01/14/2016
 Time: 14:36:03

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 15170
 EXPIRATION: 07/20/2017

BLANK TEST	0.000	14:37
INTERNAL STANDARD	VERIFIED	14:37
EXTERNAL STANDARD	0.294	14:37
BLANK TEST	0.000	14:38
EXTERNAL STANDARD	0.293	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.294	14:40
BLANK TEST	0.000	14:41
EXTERNAL STANDARD	0.293	14:42
BLANK TEST	0.000	14:43
EXTERNAL STANDARD	0.294	14:43
BLANK TEST	0.000	14:44

Average = 0.2936
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 01/14/2016
Time: 14:51:39

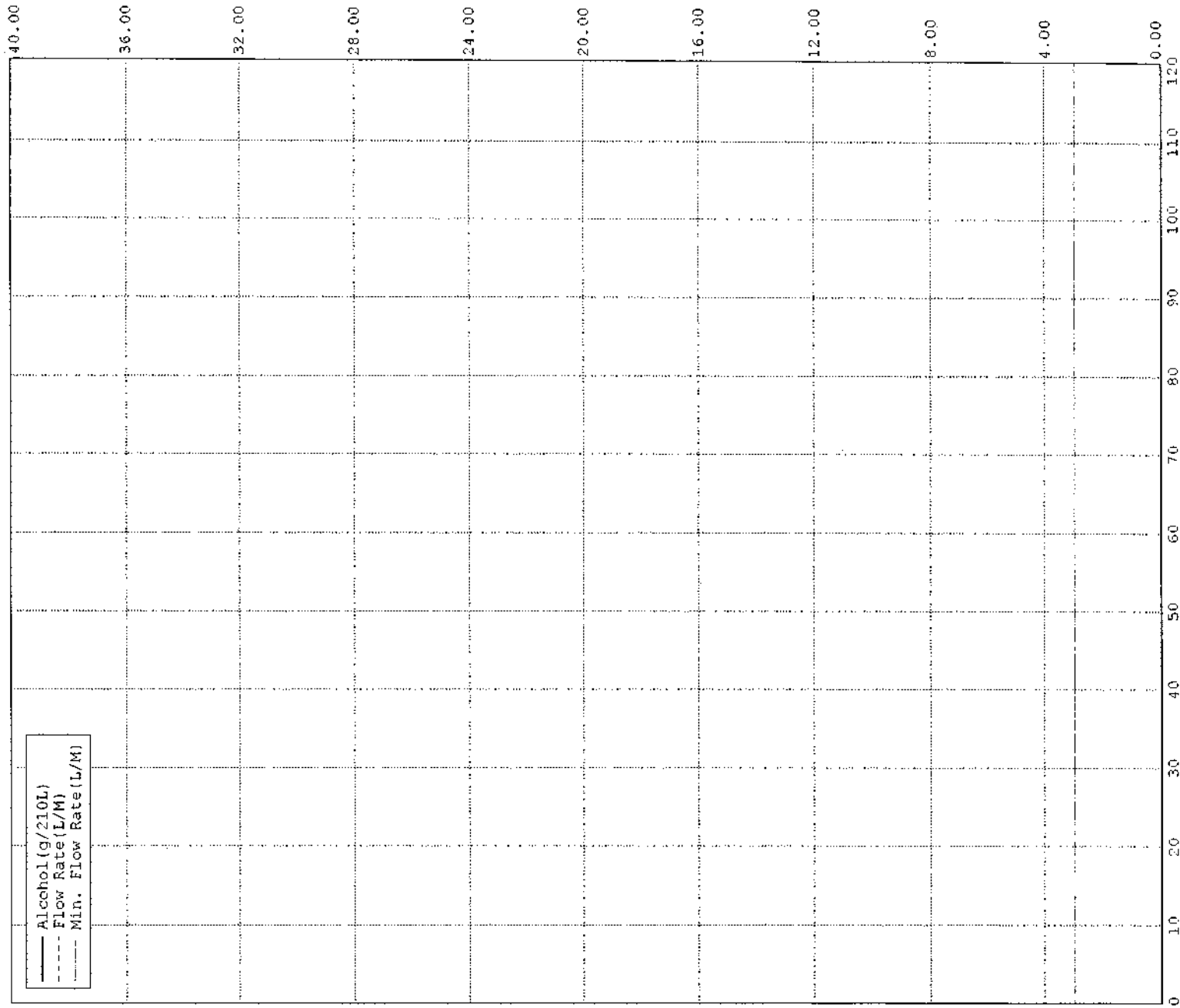
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 15:14
BLANK TEST 0.000 15:14
INTERNAL STANDARD VERIFIED 15:14
EXTERNAL STANDARD 0.077 15:14
BLANK TEST 0.000 15:15
SUBJECT SAMPLE INCOMPLETE 15:17



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 01/14/2016
Time: 15:19:19

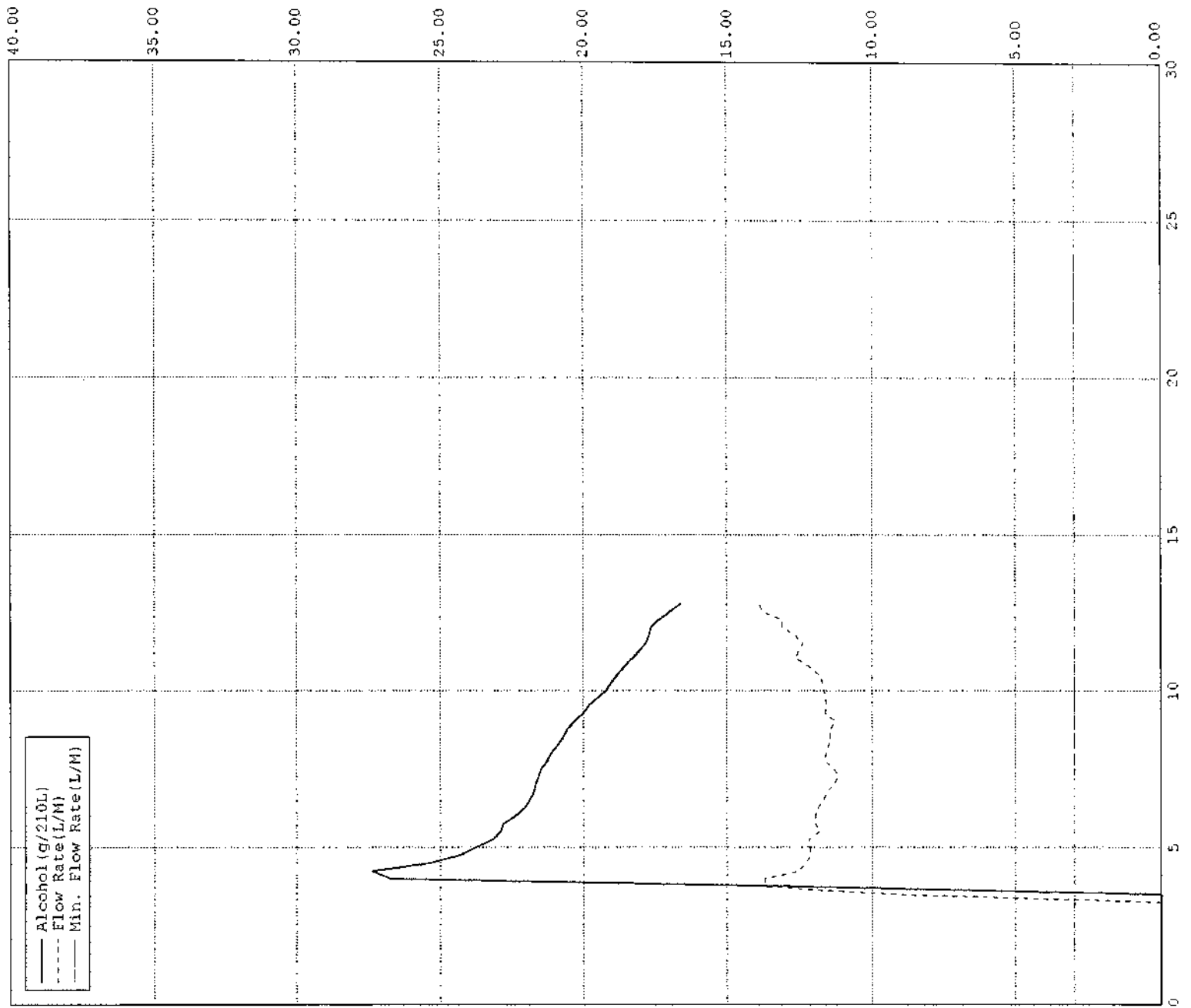
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.60: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 15:21
INTERNAL STANDARD VERIFIED 15:21
EXTERNAL STANDARD 0.077 15:22
BLANK TEST 0.000 15:23
SUBJECT SAMPLE INVALID 15:24



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 01/14/2016
Time: 15:25:27

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:
AAA1

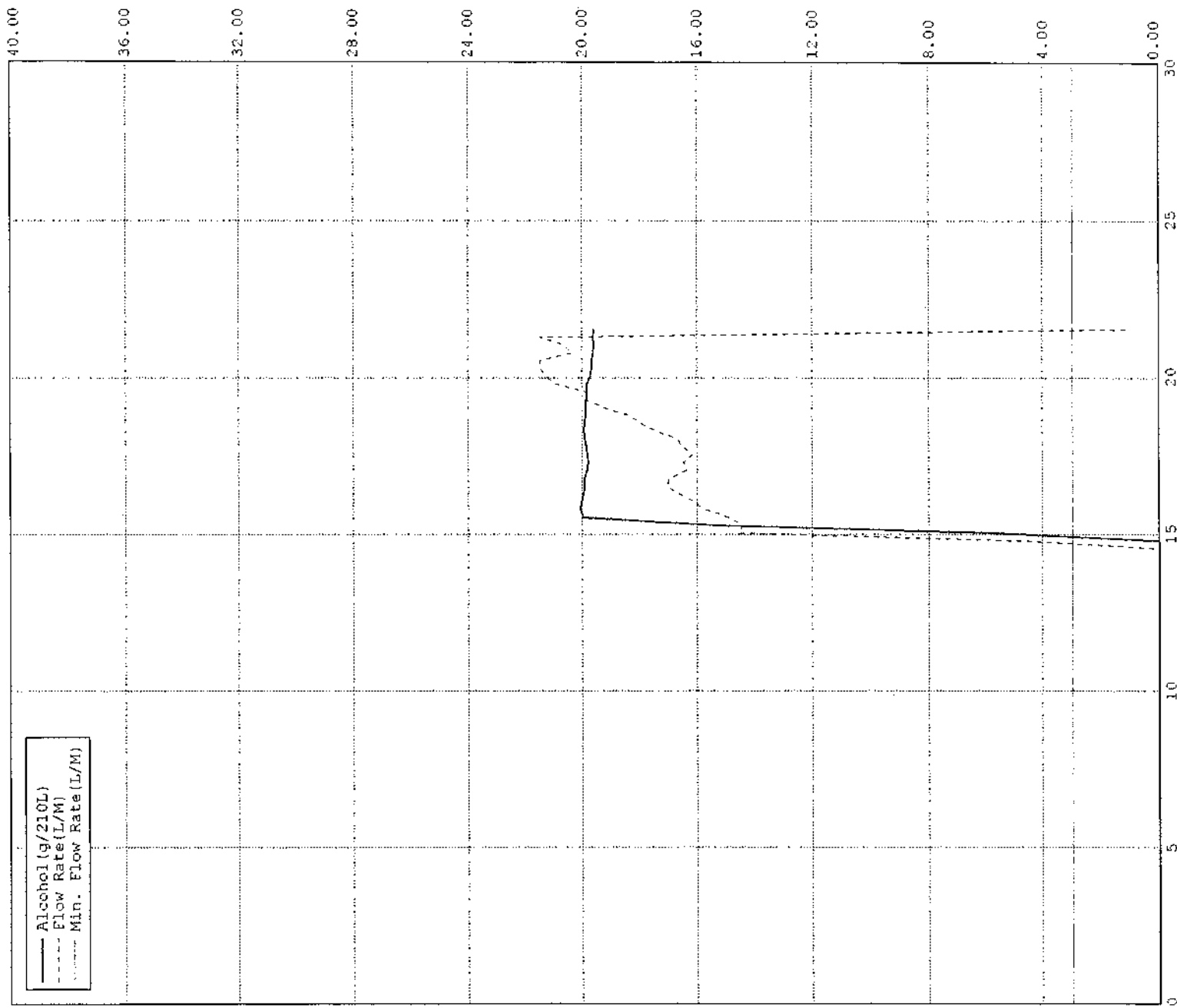
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.60: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:26
BLANK TEST	0.000	15:26
INTERNAL STANDARD	VERIFIED	15:26
Xq = 0.093 (0.38%)		
EXTERNAL STANDARD	0.077	15:27
X[1] = 0.0766 (-0.0018) (0.0029)		
BLANK TEST	0.000	15:28
SUBJECT SAMPLE	XXX	15:28
X[1] = 0.0975 (-0.0120) (0.0010)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 01/14/2016
Time: 15:31:42

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

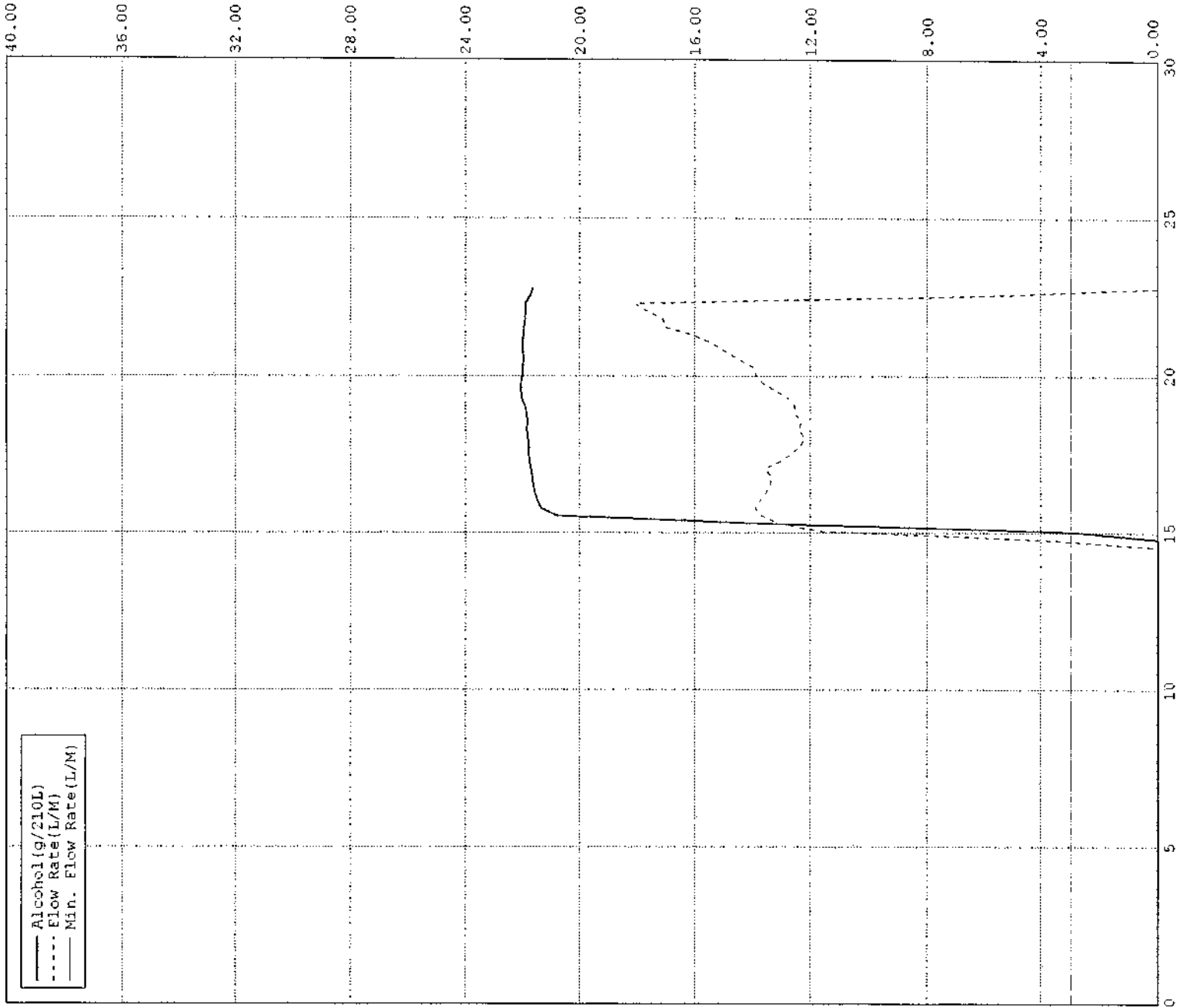
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:32
BLANK TEST	0.000	15:33
INTERNAL STANDARD	VERIFIED	15:33
Xq = 0.093 (0.578)	0.077	15:33
EXTERNAL STANDARD	X[1] = 0.0771 (-0.0022)	(0.0025)
BLANK TEST	0.000	15:34
SUBJECT SAMPLE	XXX	15:34
X[1] = 0.1084 (-0.0260)	(0.0016)	

Interference Detected

CRB



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

Date: 01/14/2016
 Time: 15:37:43

SUBJECT NAME:
 TEST TEST
 LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
 AAAA

CASE/REPORT: 16-1234
 TEST TYPE: TEST

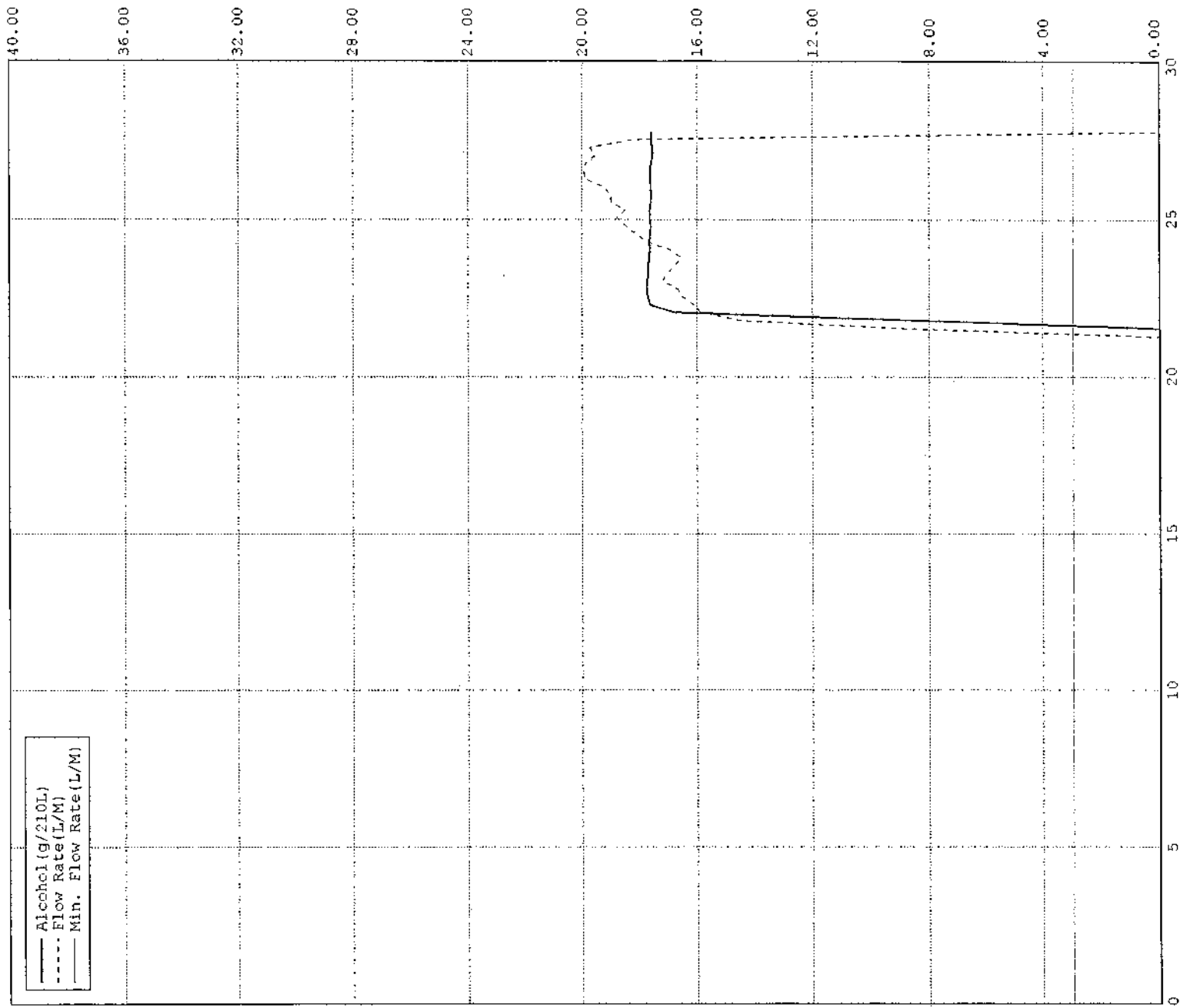
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.60: 0.079
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:39
BLANK TEST	0.000	15:39
INTERNAL STANDARD	VERIFIED	15:39
Xq = 0.093 (0.19%)		
EXTERNAL STANDARD	0.077	15:39
X[1] = 0.0767 (-0.0022)	(0.0024)	
BLANK TEST	0.000	15:40
SUBJECT SAMPLE (Vol=1.83L)	0.087	15:41
X[1] = 0.0874 (-0.0003)	(0.0013)	
BLANK TEST	0.000	15:42
EXTERNAL STANDARD	0.076	15:42
X[1] = 0.0764 (-0.0021)	(0.0014)	
BLANK TEST	0.000	15:43

Filter 2 avg = -0.0021
Filter 3 avg = 0.0023

CSB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 01/19/2016
Time: 09:34:28

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

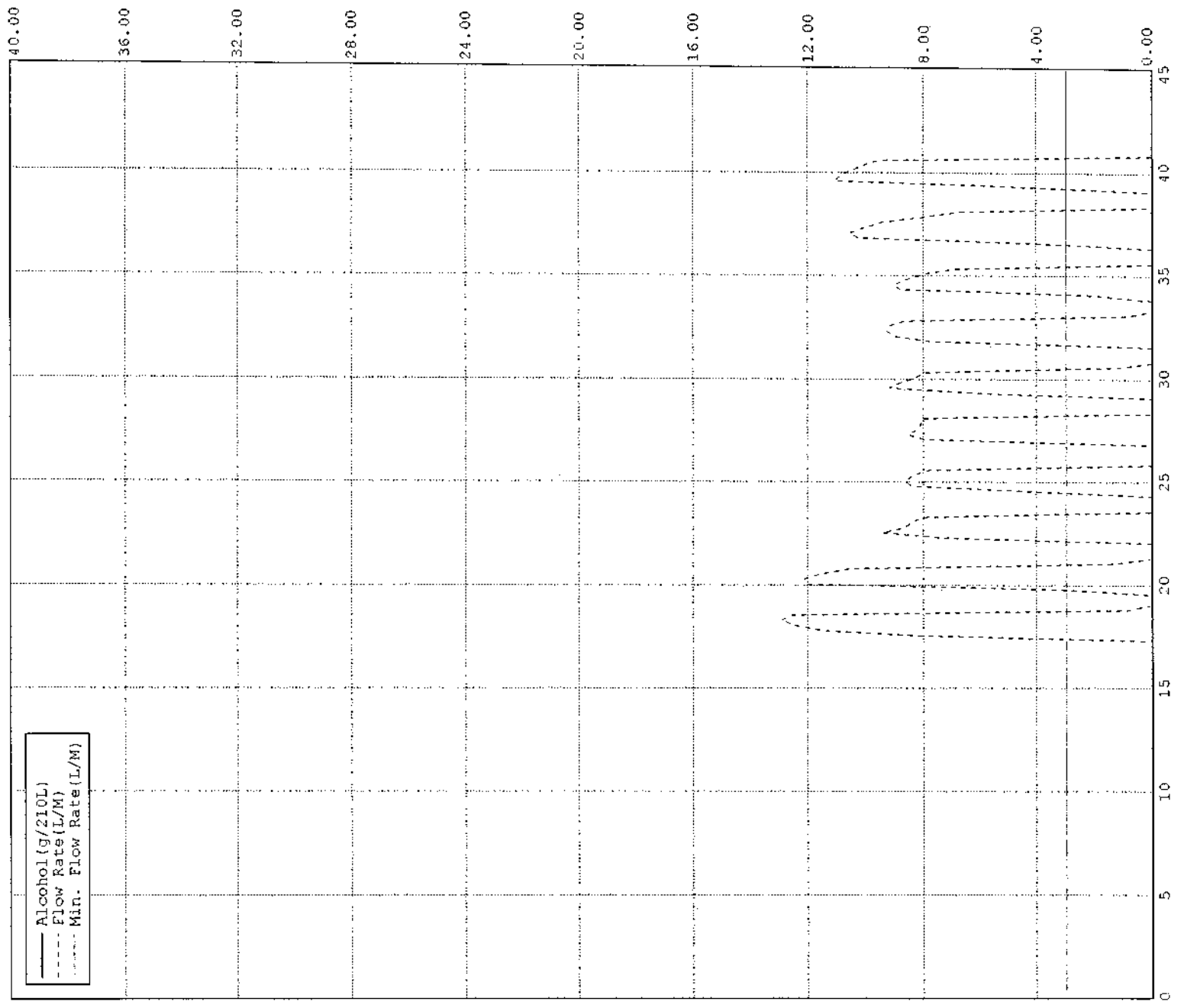
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:35
BLANK TEST 0.000 09:35
INTERNAL STANDARD VERIFIED 09:35
EXTERNAL STANDARD 0.076 09:36
BLANK TEST 0.000 09:37
SUBJECT SAMPLE XXX 09:37

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100374

Date: 01/19/2016
Time: 09:41:21

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:

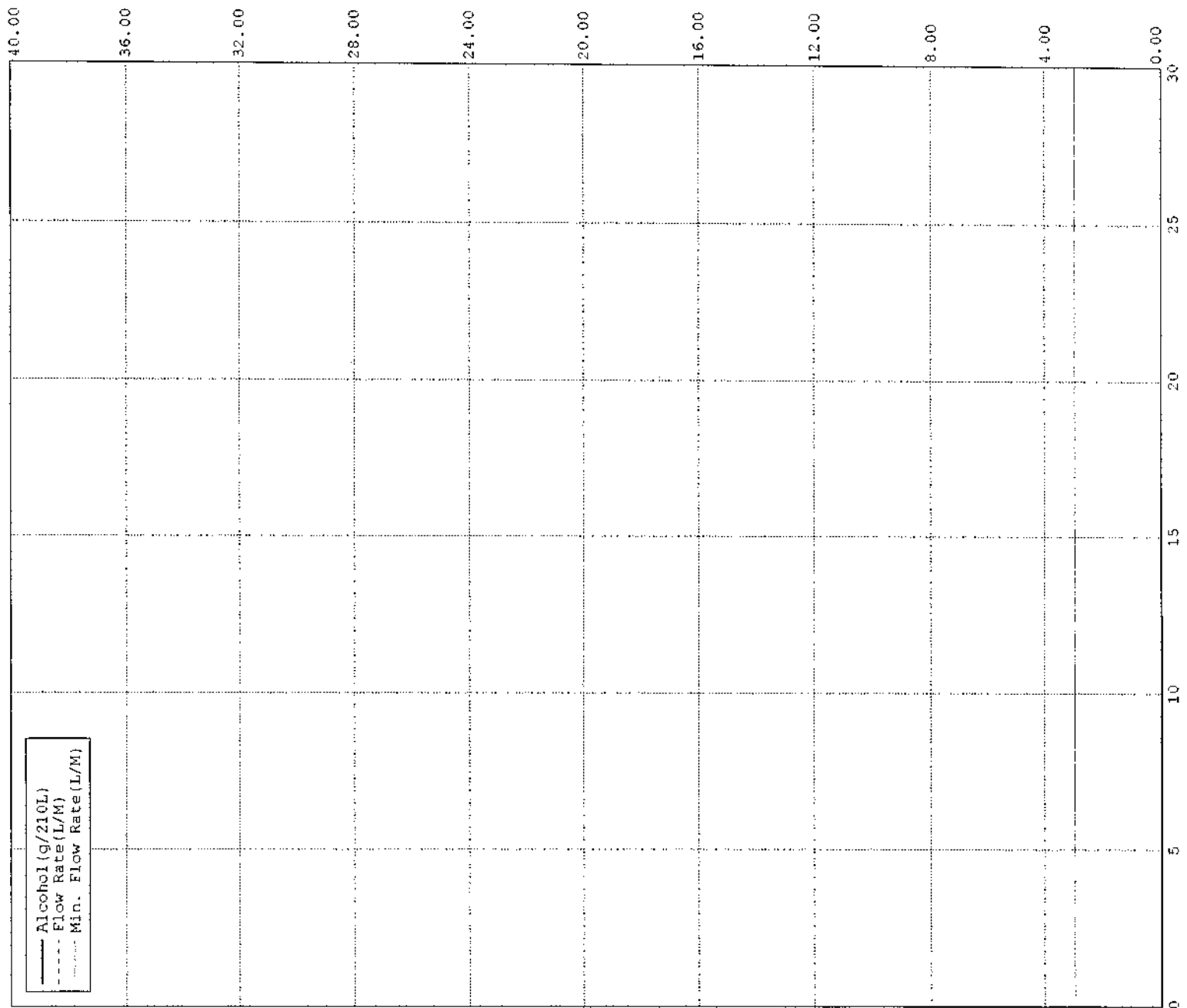
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:42
BLANK TEST 0.000 09:42
INTERNAL STANDARD VERIFIED 09:43
EXTERNAL STANDARD 0.077 09:43
BLANK TEST 0.000 09:44

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 01/19/2016
Time: 09:58:19

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:00
BLANK TEST	0.000	10:00
INTERNAL STANDARD	VERIFIED	10:00
EXTERNAL STANDARD	0.076	10:00
BLANK TEST	0.000	10:01
SUBJECT SAMPLE (Vol=2.05L)	0.000	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.077	10:02
BLANK TEST	0.000	10:03

