

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 100397 Analyst C. O. Bryant Start Date 6/27/17

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 Argas Lot AG616507 Exp 6/13/18*
- ii. 0.040g/210L Mnf Argas Lot AG630101 Exp 10/27/18*
- iii. 0.080g/210L Mnf Argas Lot AG634001 Exp 12/5/18
- iv. 0.100g/210L Mnf Argas Lot AG629304 Exp 10/19/18*
- v. 0.200g/210L Mnf Guth Lot 16190 Exp 8/15/18
 - 1. Simulator S/N DR5298 Date Calibrated 9/14/16
- vi. 0.300g/210L Mnf Guth Lot 16210 Exp 8/22/18
 - 1. Simulator S/N SD1177 Date Calibrated 9/13/16

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 SD1199 Date Calibrated 9/13/16
- ii. Isopropanol - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18
 - 1. Simulator S/N SD1088 Date Calibrated 9/13/16
- iii. Negative Control - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17
 - 1. Simulator S/N DR4161 Date Calibrated 9/14/16

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 7/3/17

* Tank wasn't inserted prior to acceptance of linearity tank info. Tank pressure read 0psi. Actual pressure > 0psi. COB 7/12/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 06/27/2017
Time: 09:06:55

VERSIONS
DMT: 3.02
PIC: 3.02
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 = 1.72 V PASSED
(1.03 V - 2.41 V)
Cooler Voltage = 1.71 V PASSED
(1.04 V - 2.44 V)
Bias Voltage = 81 V PASSED
(49 V - 113 V)
Chopper Freq = 539 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.014 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 = 0.093 0.09% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100397

Date: 06/27/2017
Time: 9:15 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 47.6°C

Current Barometer 29.7 in
Volume (Ltr) 1.56

Settings

Lamp: 1.72 V
Bias: 81 V
Cooler: 1.76 V
Chopper: 538 Hz

Voltages (V)

Flow: 1.06 V
Detector: -0.047 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 05/18/2011
Time: 13:35:39

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 10260
EXPIRATION: 10/25/2010

Ca = 0.1000
CAL = 0.983031 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0079 0.0010 <= b2 < 0.0100
b3 = 0.0004 0.0000 <= b3 < 0.0040
Xq = 0.0932 0.0500 <= Xq < 0.2000
a21 = 1.208582 1.050 <= a21 < 1.300
a31 = 0.521034 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 06/27/2017
Time: 09:17:06

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

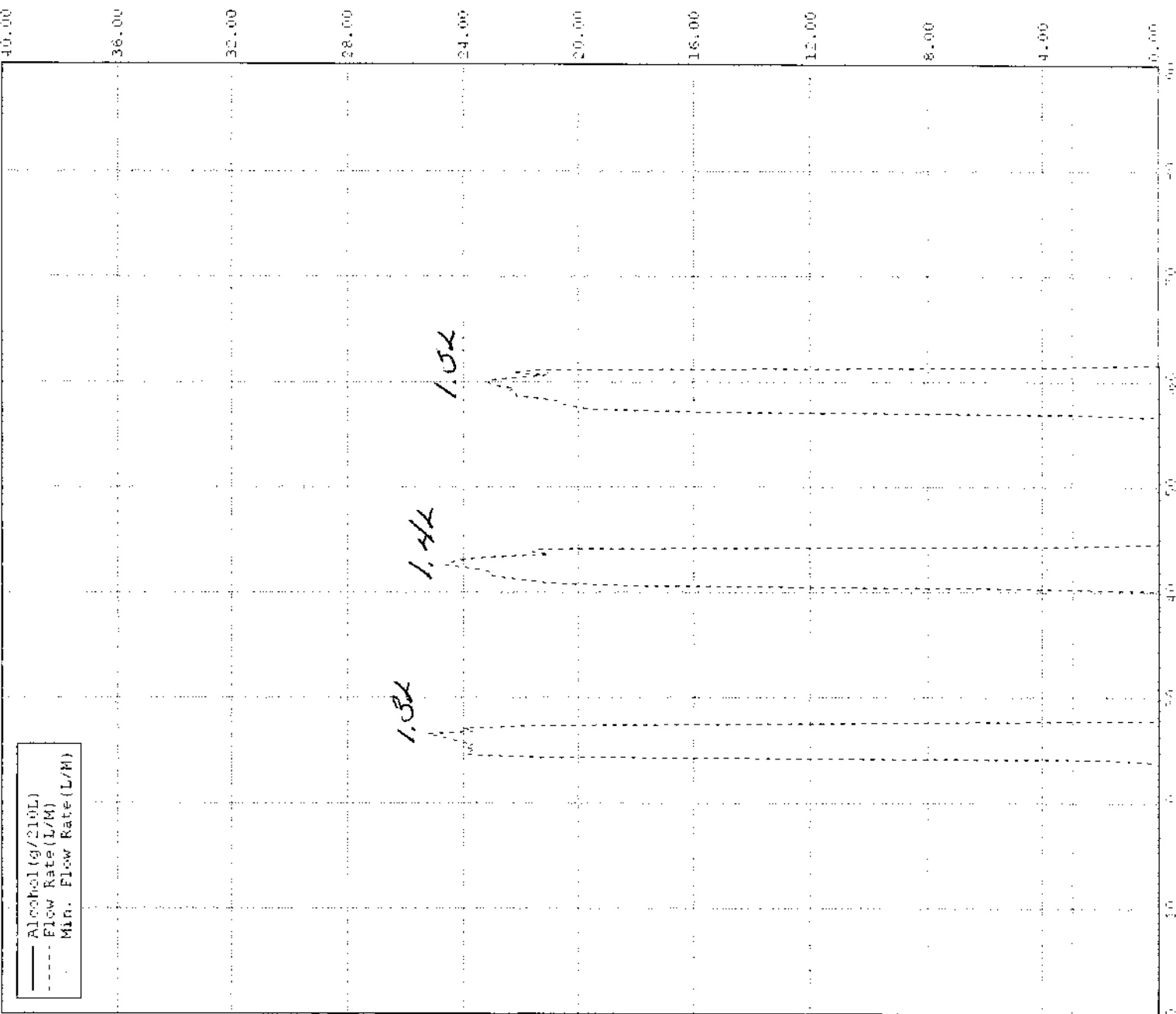
DEPT/AGENCY:
AAA1

CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:18
BLANK TEST	0.000	09:18
INTERNAL STANDARD	VERIFIED	09:18
EXTERNAL STANDARD	0.079	09:18
BLANK TEST	0.000	09:19
SUBJECT SAMPLE (Vol=1.53L)	0.000	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.079	09:21
BLANK TEST	0.000	09:22



LINEARITY CHECK

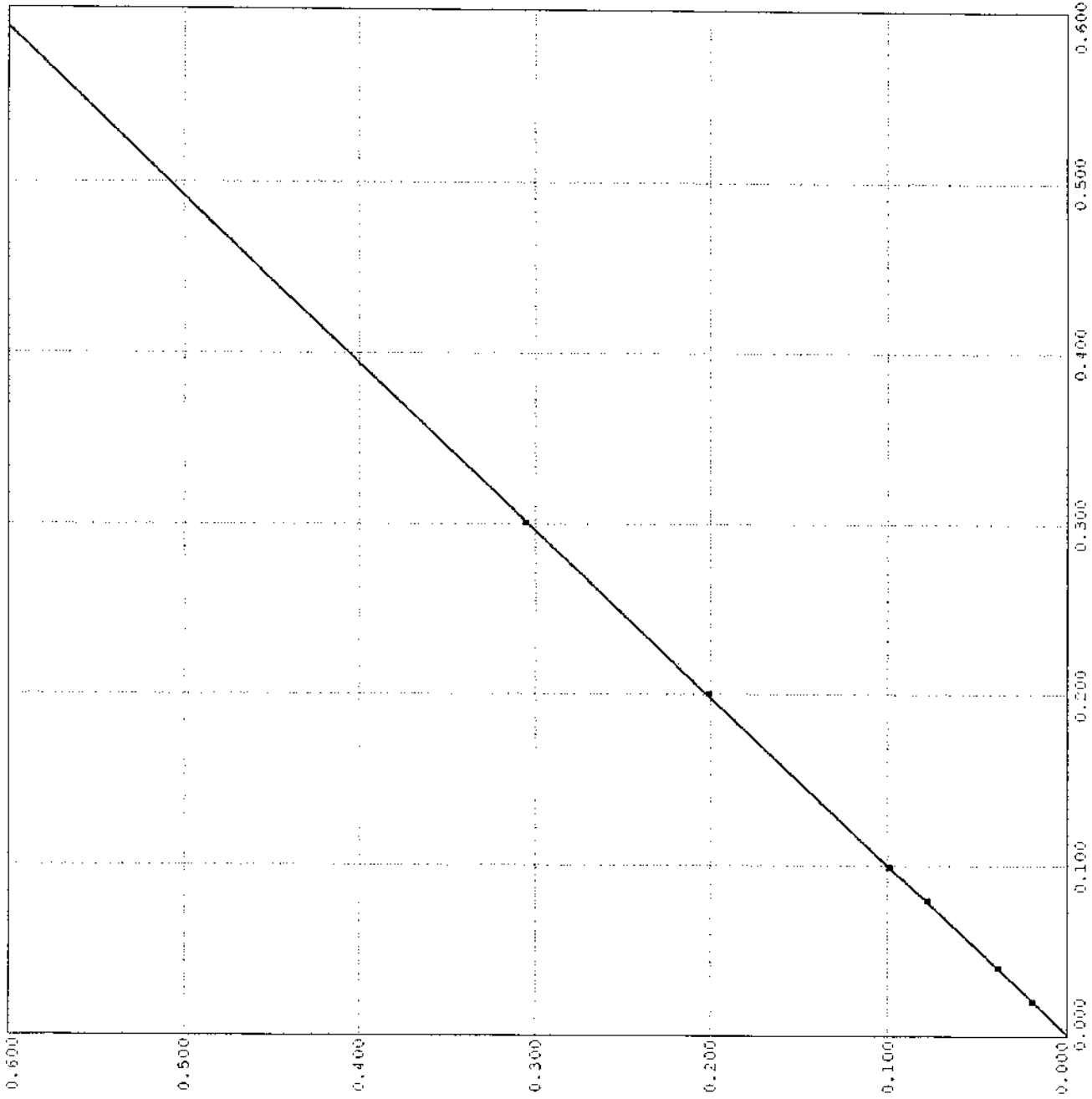
Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 06/27/2017
Time: 09:51:24

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0204	0.0005
0.040	0.0396	0.0005
0.079	0.0790	0.0000
0.099	0.1000	0.0000
0.200	0.2016	0.0011
0.300	0.3062	0.0008

SLOPE = 1.020755
R² = 0.999921



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

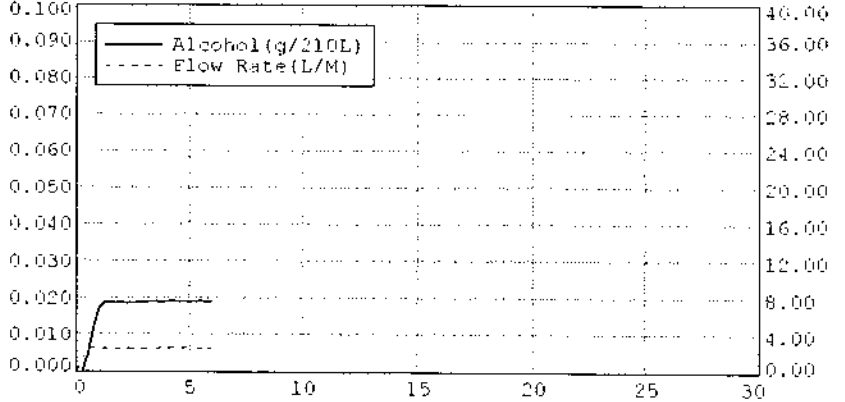
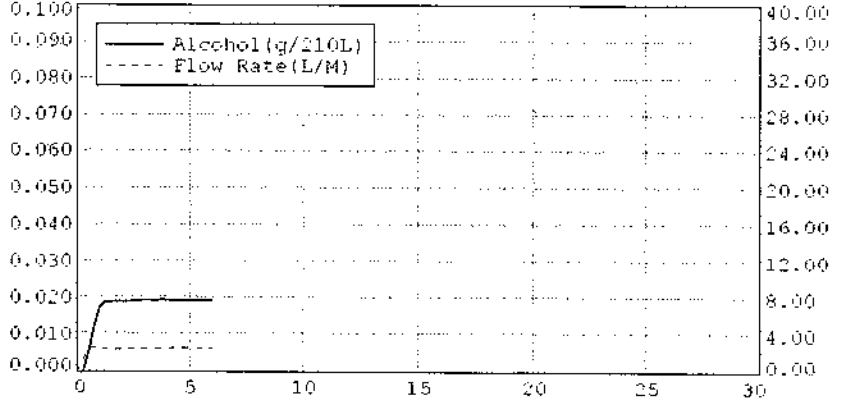
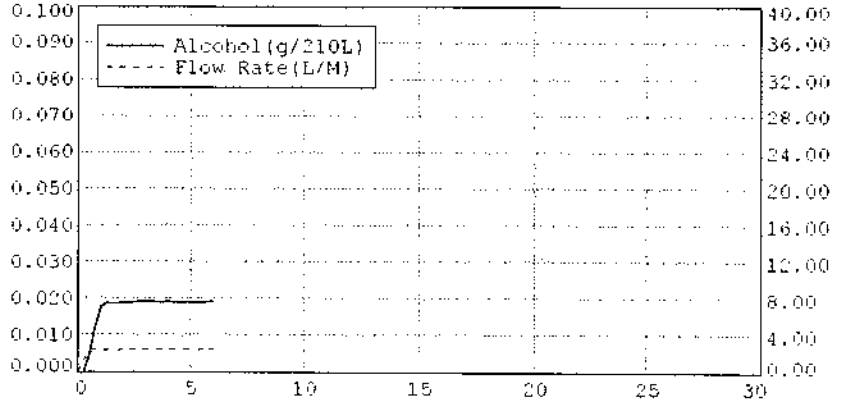
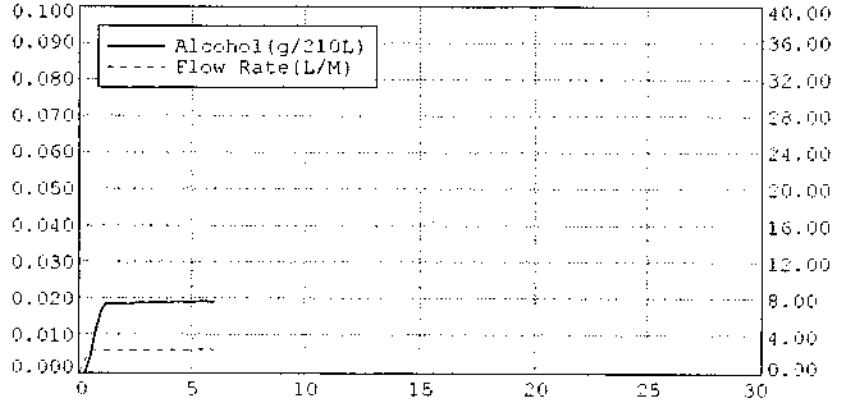
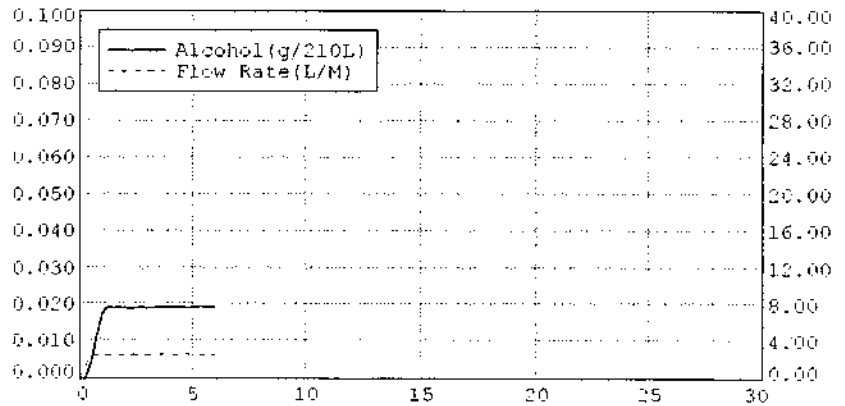
Date: 06/27/2017
 Time: 09:51:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.68: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 0 psi

BLANK TEST	0.000	09:52
INTERNAL STANDARD	VERIFIED	09:52
EXTERNAL STANDARD	0.021	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.020	09:54
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.020	09:55
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.021	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.020	09:57
BLANK TEST	0.000	09:58

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

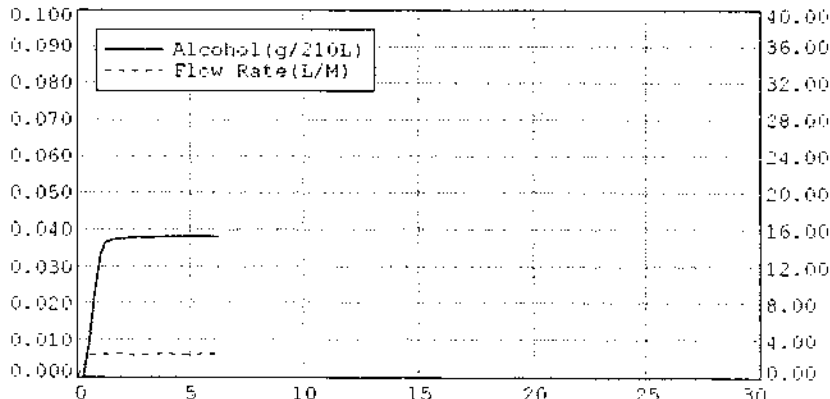
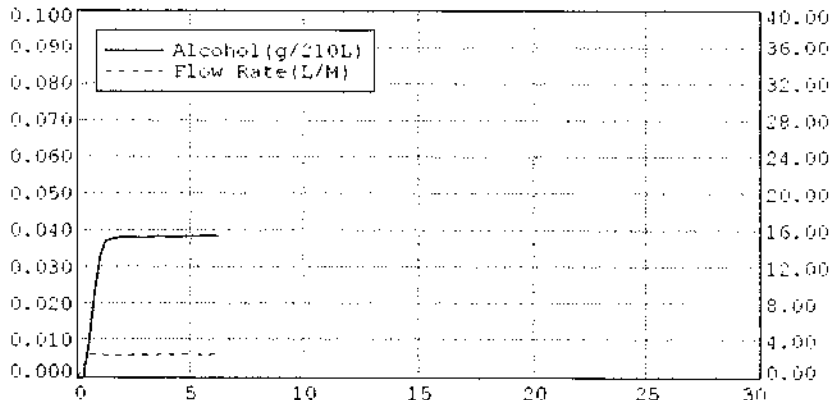
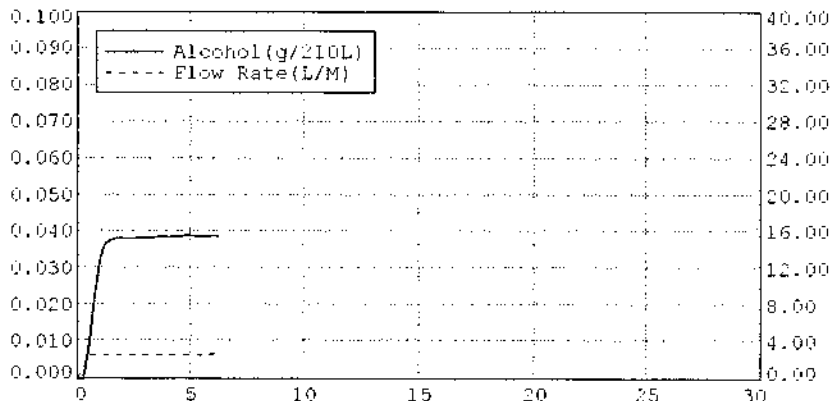
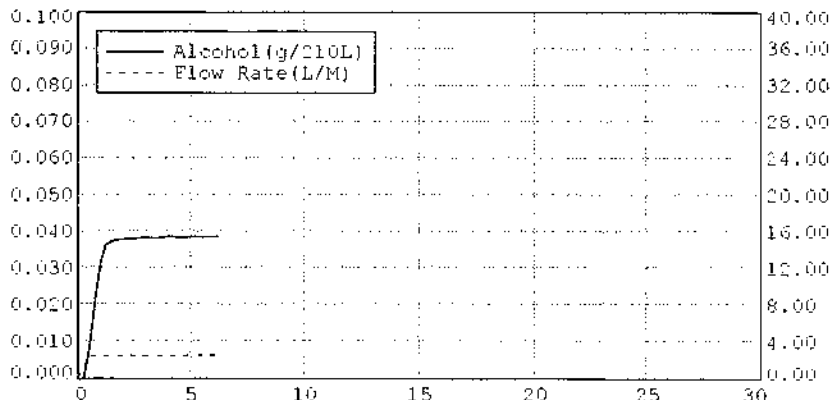
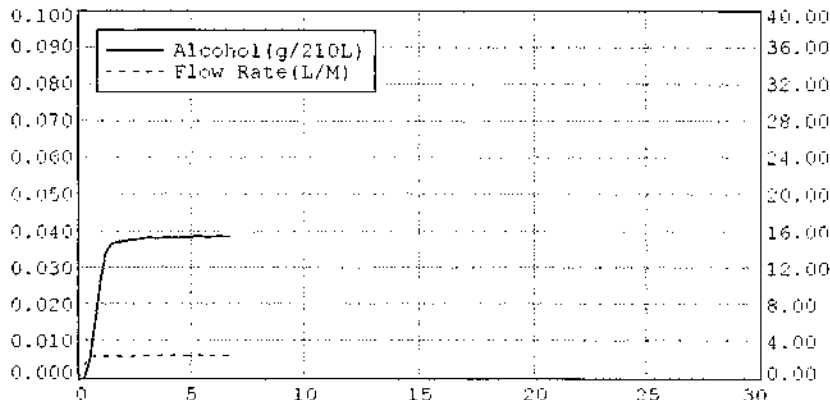
Date: 06/27/2017
 Time: 09:59:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.68: 0.040
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 0 psi

BLANK TEST	0.000	10:00
INTERNAL STANDARD	VERIFIED	10:00
EXTERNAL STANDARD	0.040	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.039	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.040	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.040	10:04
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.039	10:05
BLANK TEST	0.000	10:06

Average = 0.0396
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100397

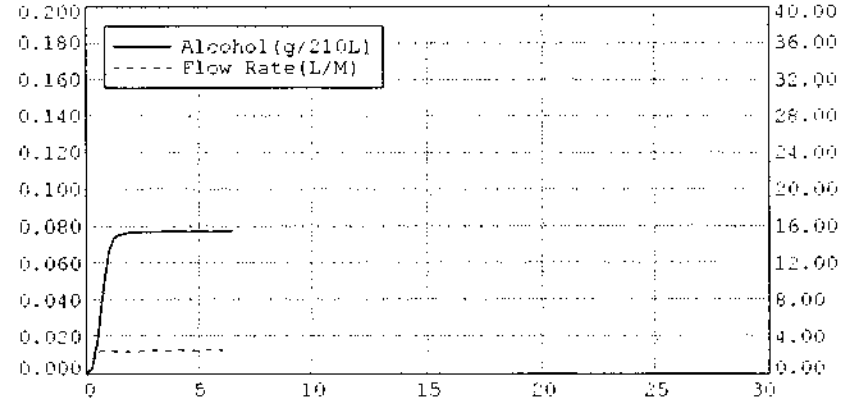
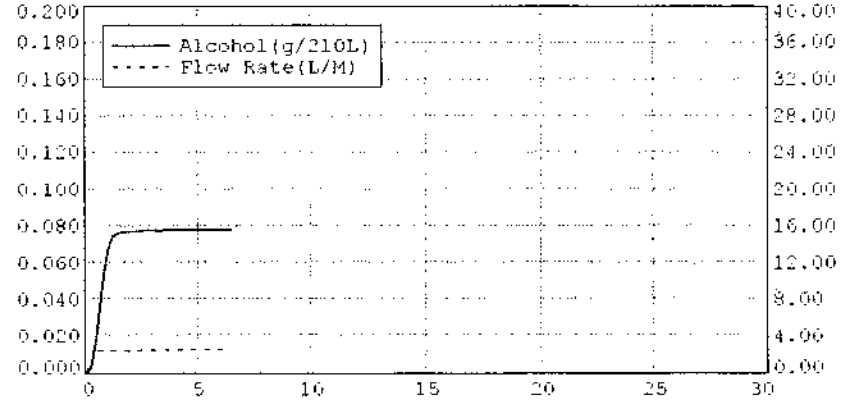
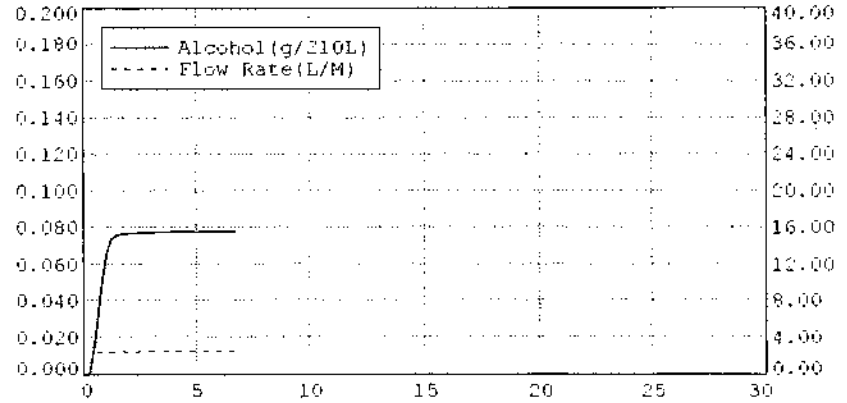
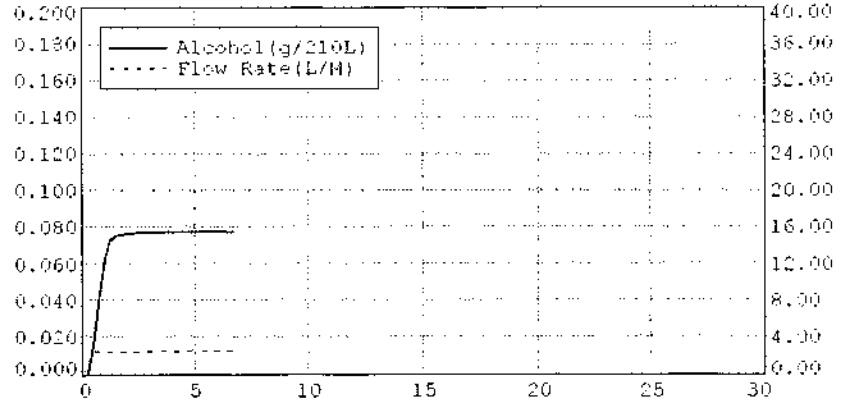
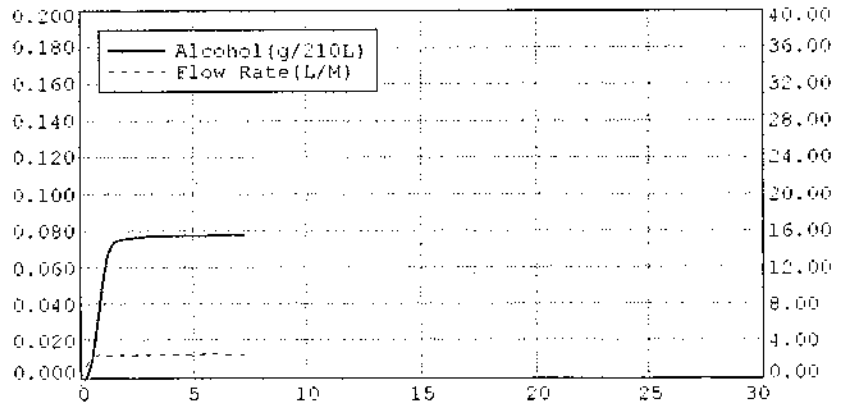
Date: 06/27/2017
Time: 10:06:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.67: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018
TANK PRESSURE: 899 psi

BLANK TEST	0.000	10:07
INTERNAL STANDARD	VERIFIED	10:07
EXTERNAL STANDARD	0.079	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.079	10:09
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.079	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.079	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.079	10:12
BLANK TEST	0.000	10:13

Average = 0.0790
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

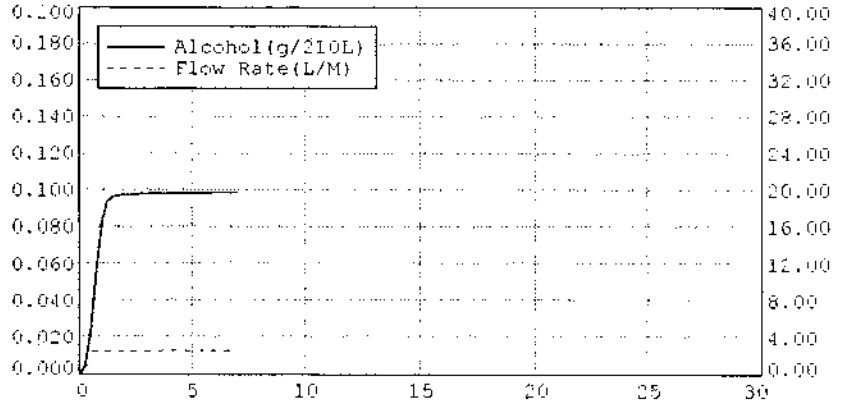
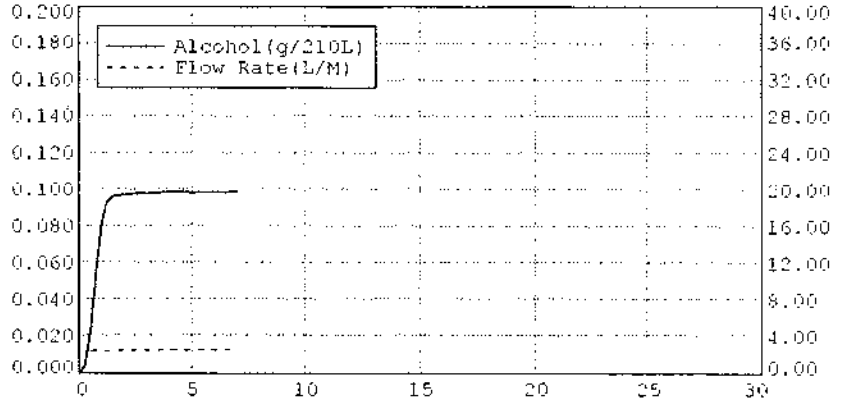
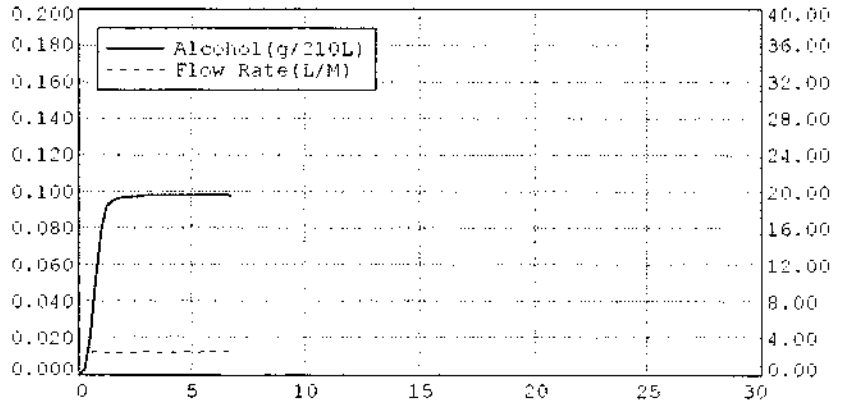
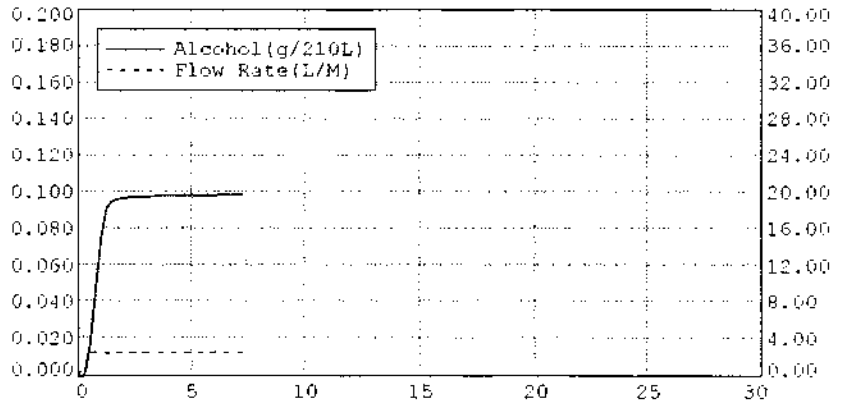
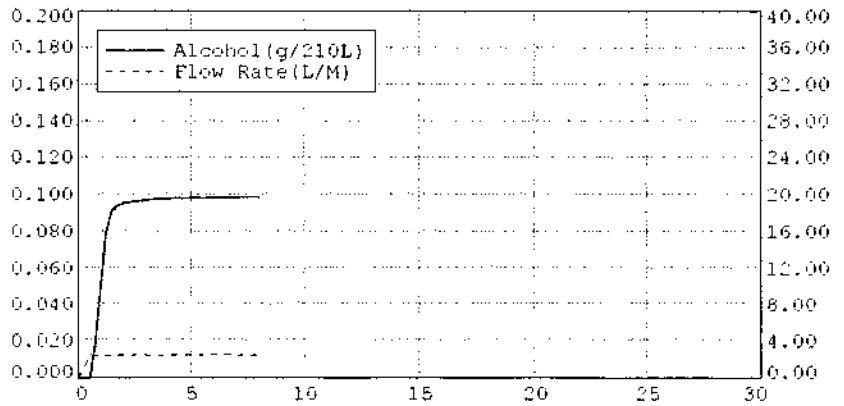
Date: 06/28/2017
 Time: 10:43:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.74: 0.099
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 0 psi

BLANK TEST	0.000	10:44
INTERNAL STANDARD	VERIFIED	10:44
EXTERNAL STANDARD	0.100	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.100	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.100	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.100	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.100	10:49
BLANK TEST	0.000	10:49

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

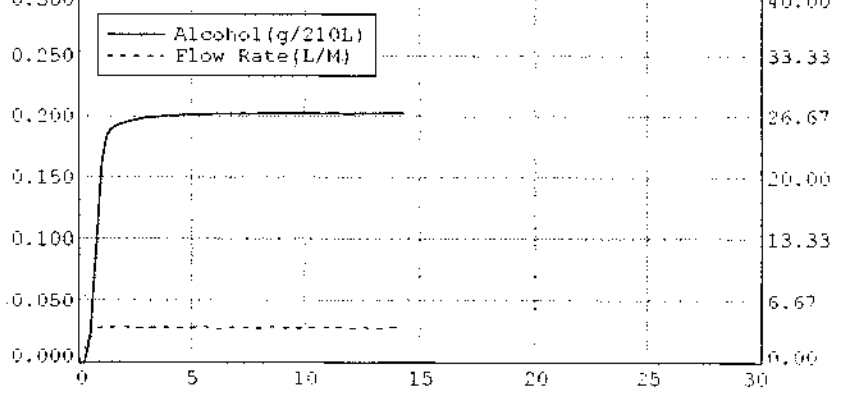
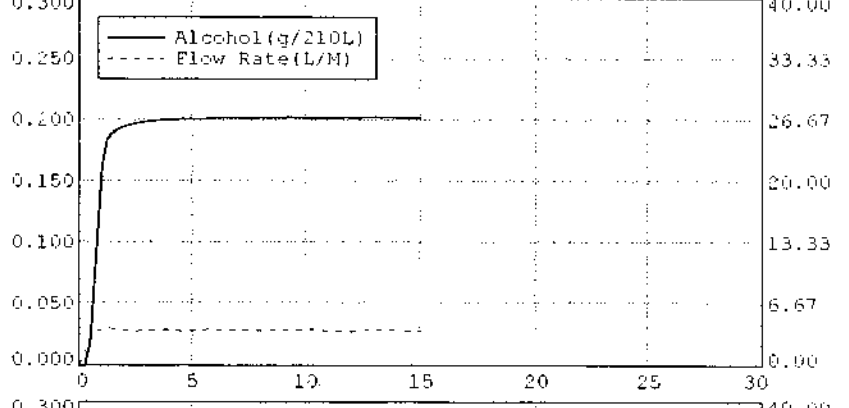
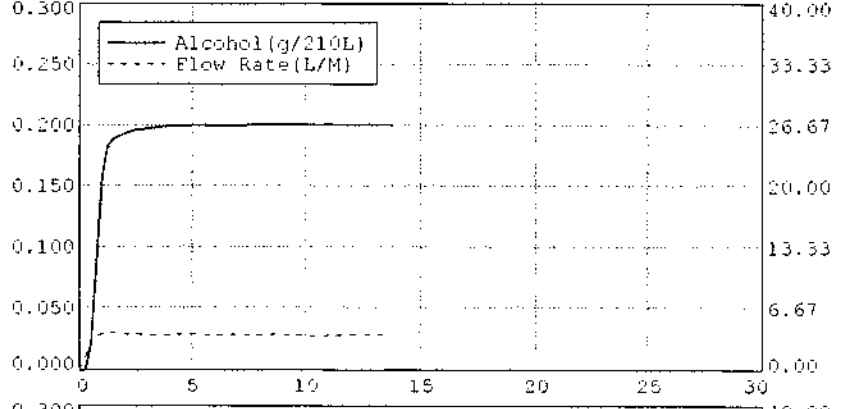
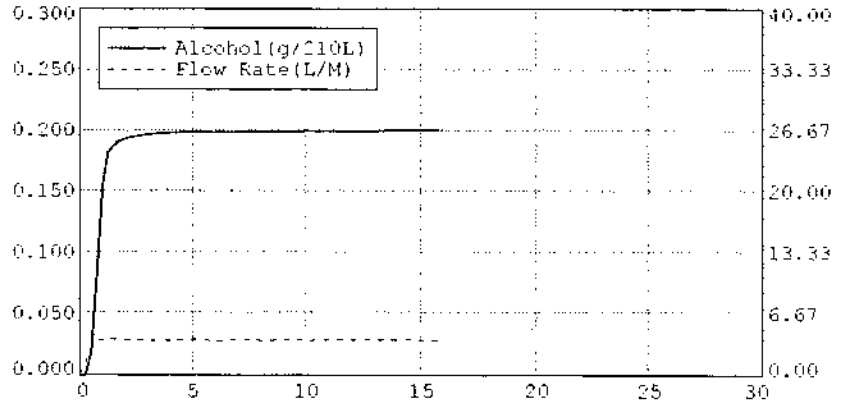
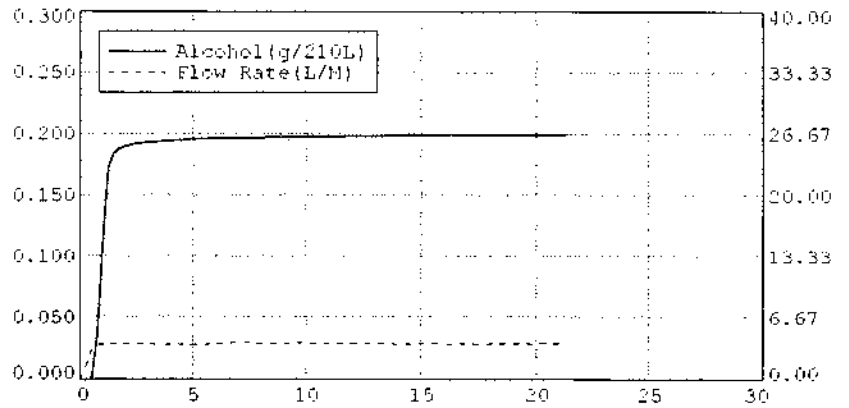
Date: 06/28/2017
 Time: 11:04:16

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 16190
 EXPIRATION: 08/15/2018

BLANK TEST	0.000	11:05
INTERNAL STANDARD	VERIFIED	11:05
EXTERNAL STANDARD	0.200	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.201	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.202	11:08
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.202	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.203	11:11
BLANK TEST	0.000	11:11

Average = 0.2016
 Std Dev = 0.0011



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

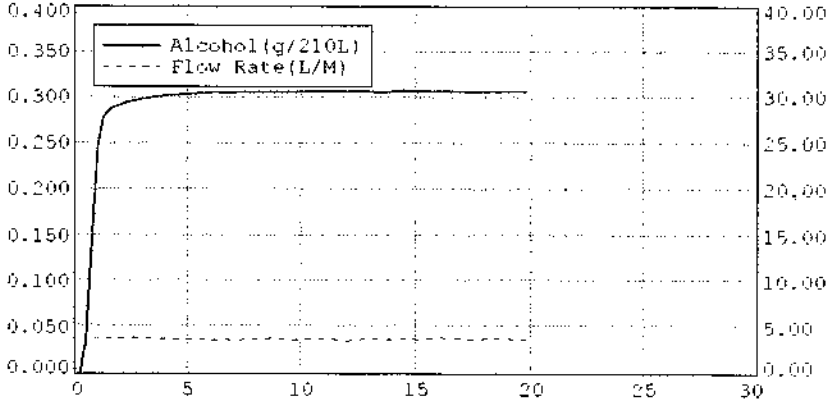
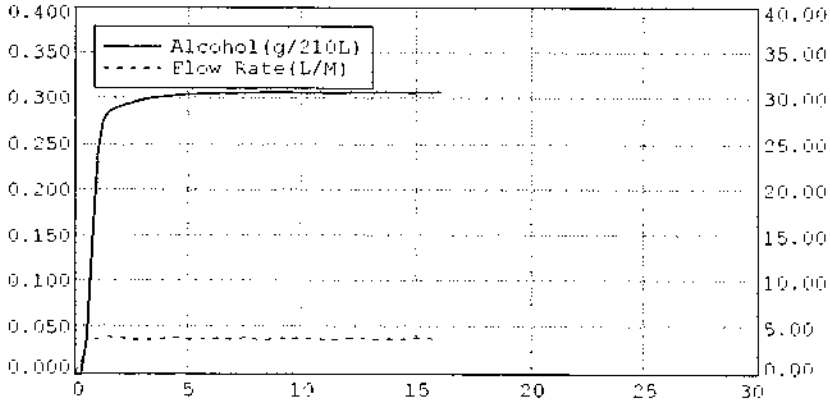
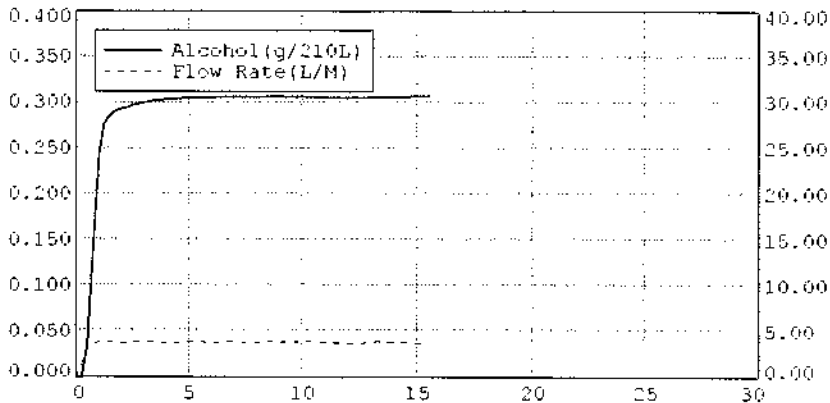
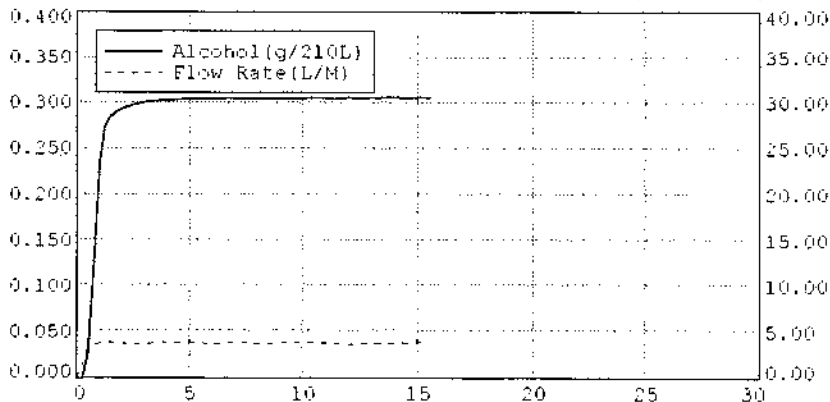
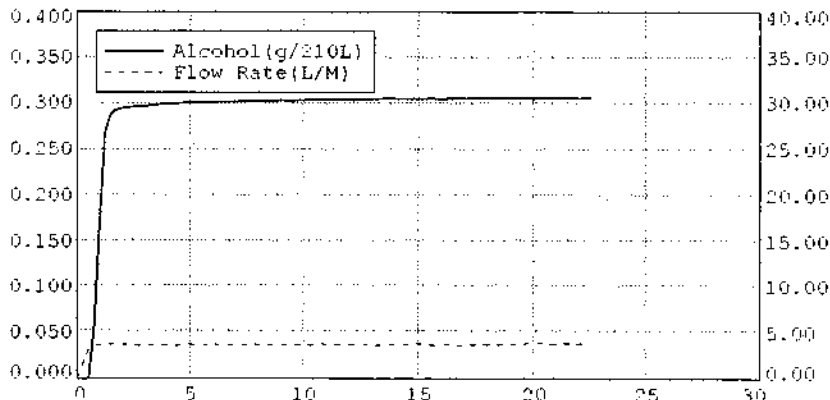
Date: 06/28/2017
 Time: 12:35:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 16210
 EXPIRATION: 08/22/2018

BLANK TEST	0.000	12:37
INTERNAL STANDARD	VERIFIED	12:37
EXTERNAL STANDARD	0.306	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.305	12:39
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.306	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.307	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.307	12:43
BLANK TEST	0.000	12:44

Average = 0.3062
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 07/03/2017
Time: 13:44:32

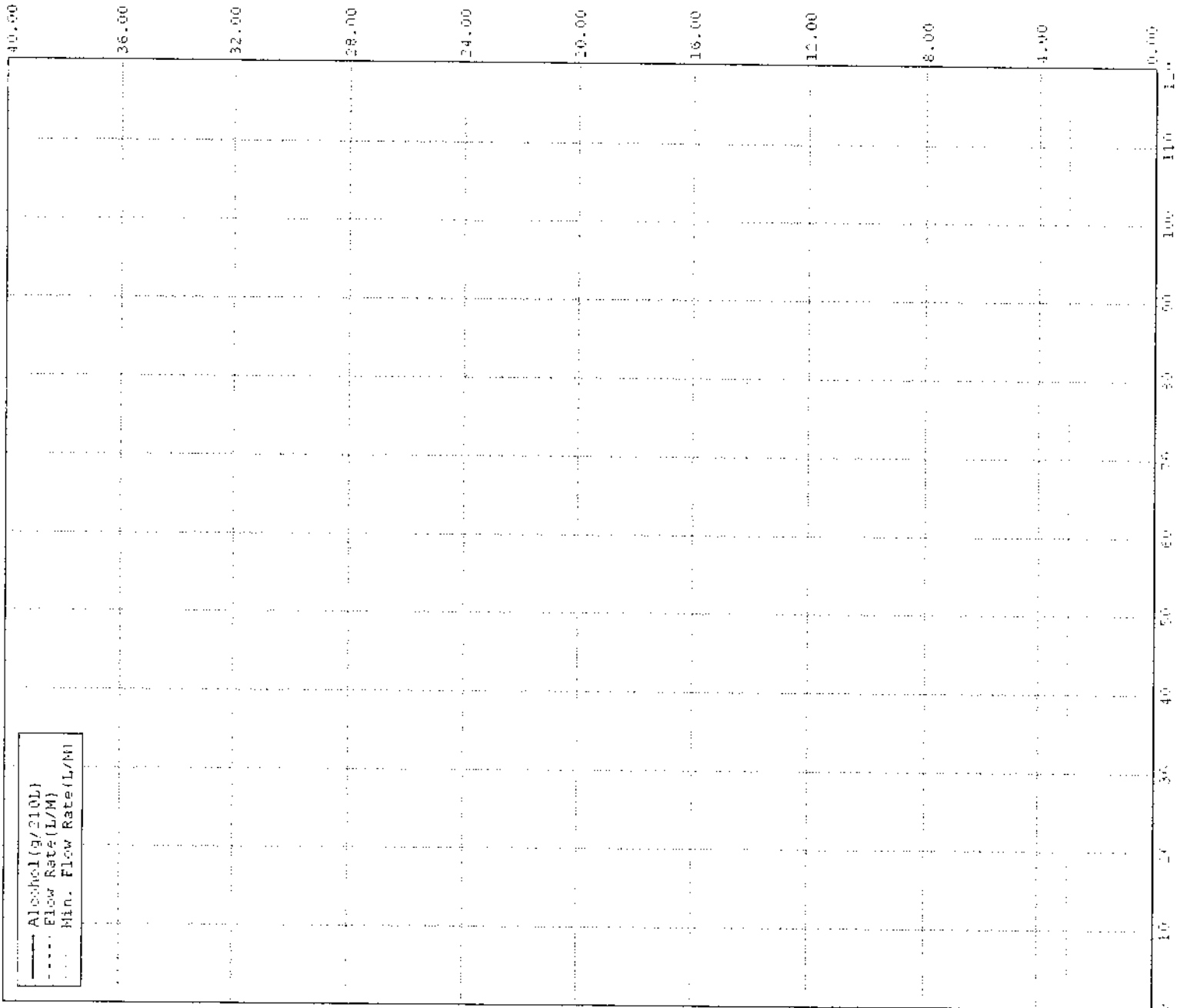
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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 29.79: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:46
BLANK TEST 0.000 13:46
INTERNAL STANDARD VERIFIED 13:46
EXTERNAL STANDARD 0.079 13:47
BLANK TEST 0.000 13:48
SUBJECT SAMPLE INCOMPLETE 13:50



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 07/03/2017
Time: 13:51:40

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

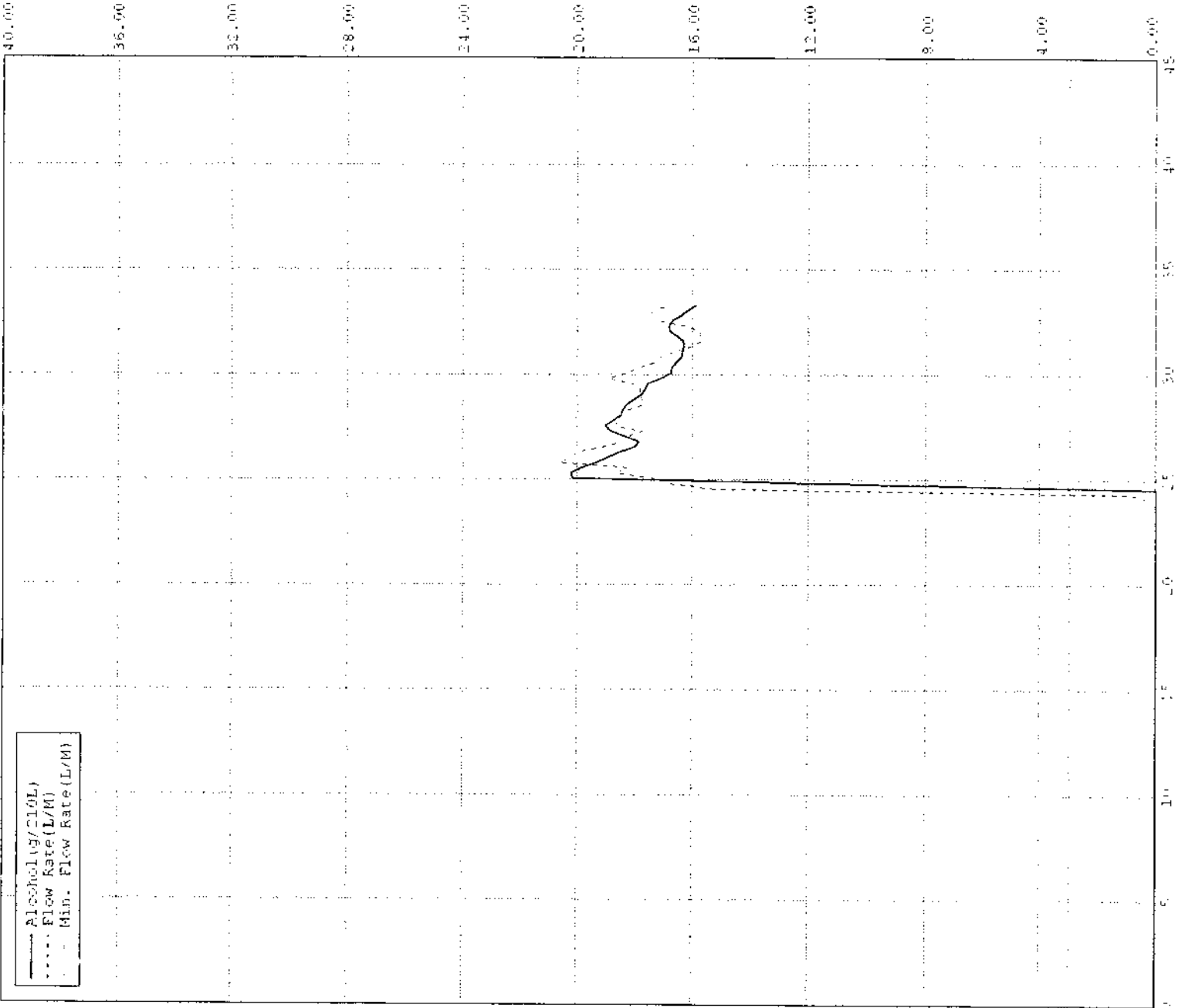
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:53
BLANK TEST 0.000 13:53
INTERNAL STANDARD VERIFIED 13:53
EXTERNAL STANDARD 0.079 13:53
BLANK TEST 0.000 13:54
SUBJECT SAMPLE INVALID 13:55

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 07/03/2017
Time: 13:57:05

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 17-1234
TEST TYPE: TEST

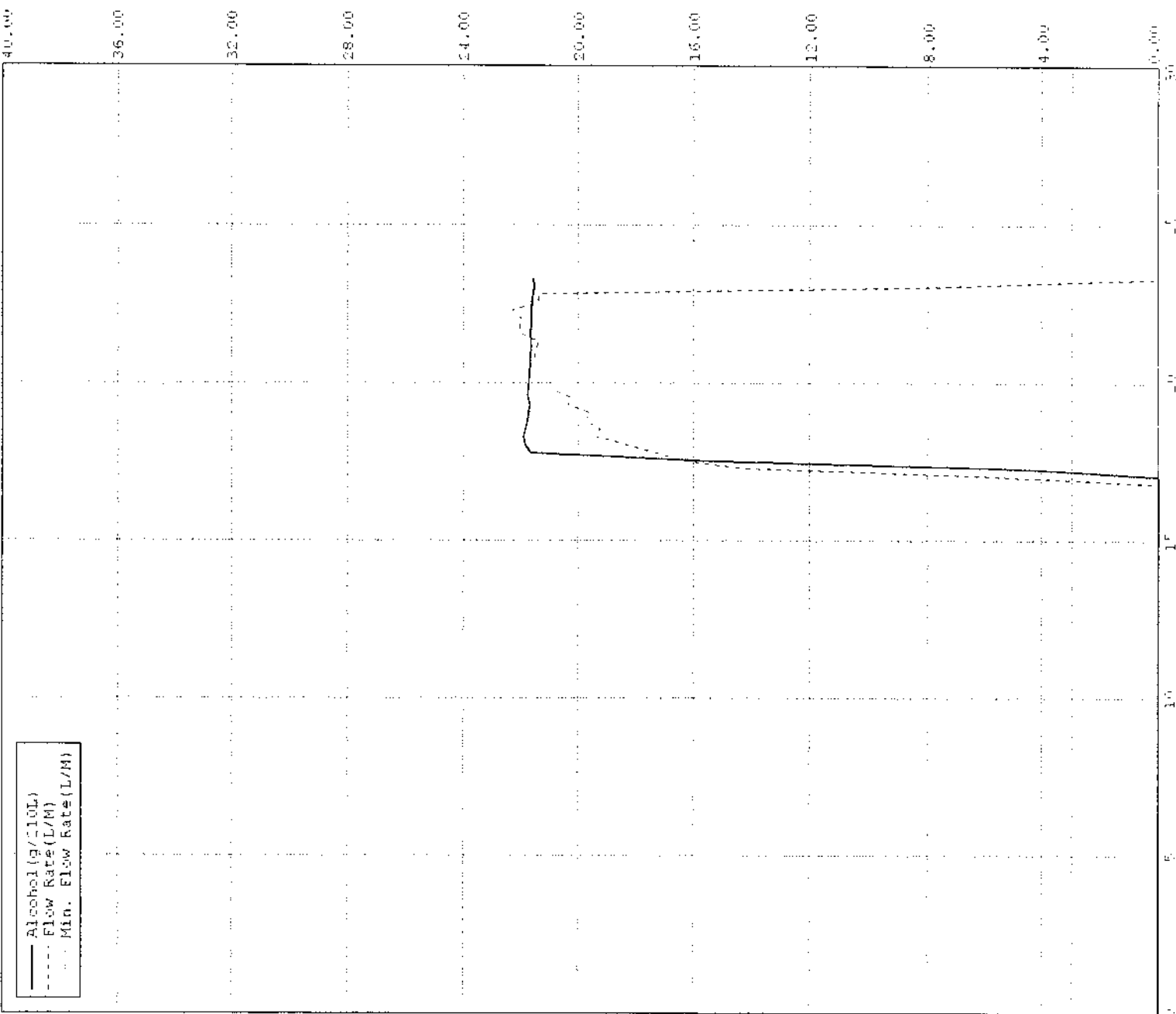
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:58
BLANK TEST	0.000	13:58
INTERNAL STANDARD	VERIFIED	13:58
Xq = 0.093 (0.19%)		
EXTERNAL STANDARD	0.079	13:58
X[1] = 0.0787 (-0.0019)	(0.0011)	
BLANK TEST	0.000	13:59
SUBJECT SAMPLE	XXX	13:59
X[1] = 0.1081 (-0.0168)	(0.0009)	

Interference Detected

CAB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 07/03/2017
Time: 14:03:26

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

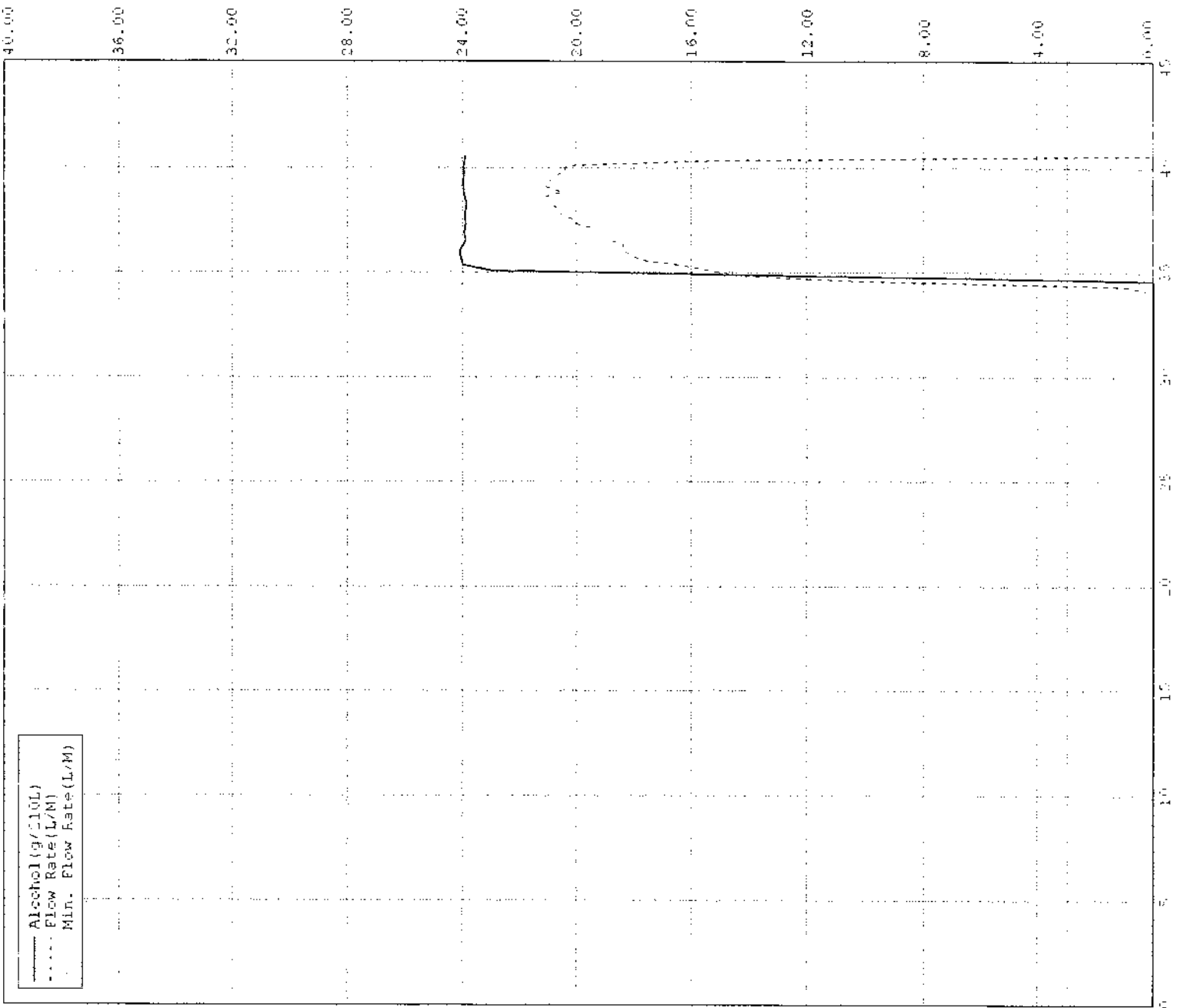
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:04
BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:04
Xq = 0.094 (0.38%)		
EXTERNAL STANDARD	0.079	14:04
X[1] = 0.0789 (-0.0018) (0.0019)		
BLANK TEST	0.000	14:05
SUBJECT SAMPLE	XXX	14:06
X[1] = 0.1193 (-0.0300) (0.0010)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 07/03/2017
Time: 14:12:30

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

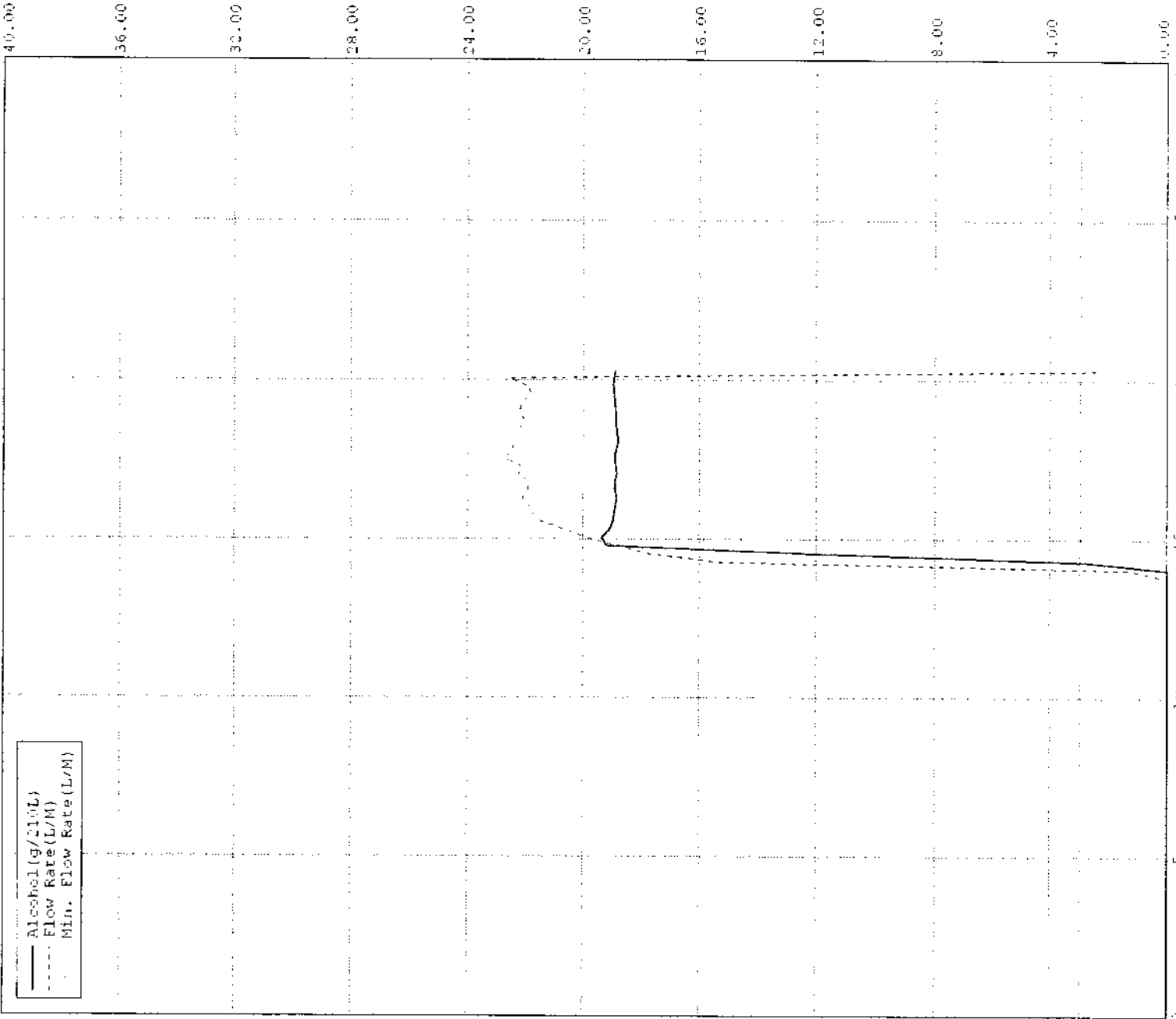
NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:13
BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:13
Xq = 0.094 (0.75%)		
EXTERNAL STANDARD	0.079	14:14
X[1] = 0.0795 (-0.0009)	(0.0024)	
BLANK TEST	0.000	14:15
SUBJECT SAMPLE (Vol=2.14L)	0.094	14:15
X[1] = 0.0947 (0.0015)	(0.0006)	
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.079	14:16
X[1] = 0.0788 (-0.0010)	(0.0019)	
BLANK TEST	0.000	14:17

Filter 3 avg = 0.0018
0087/14/17

Filter 2 avg = -0.0014
0087/15/17

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 07/03/2017
Time: 14:31:08

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:

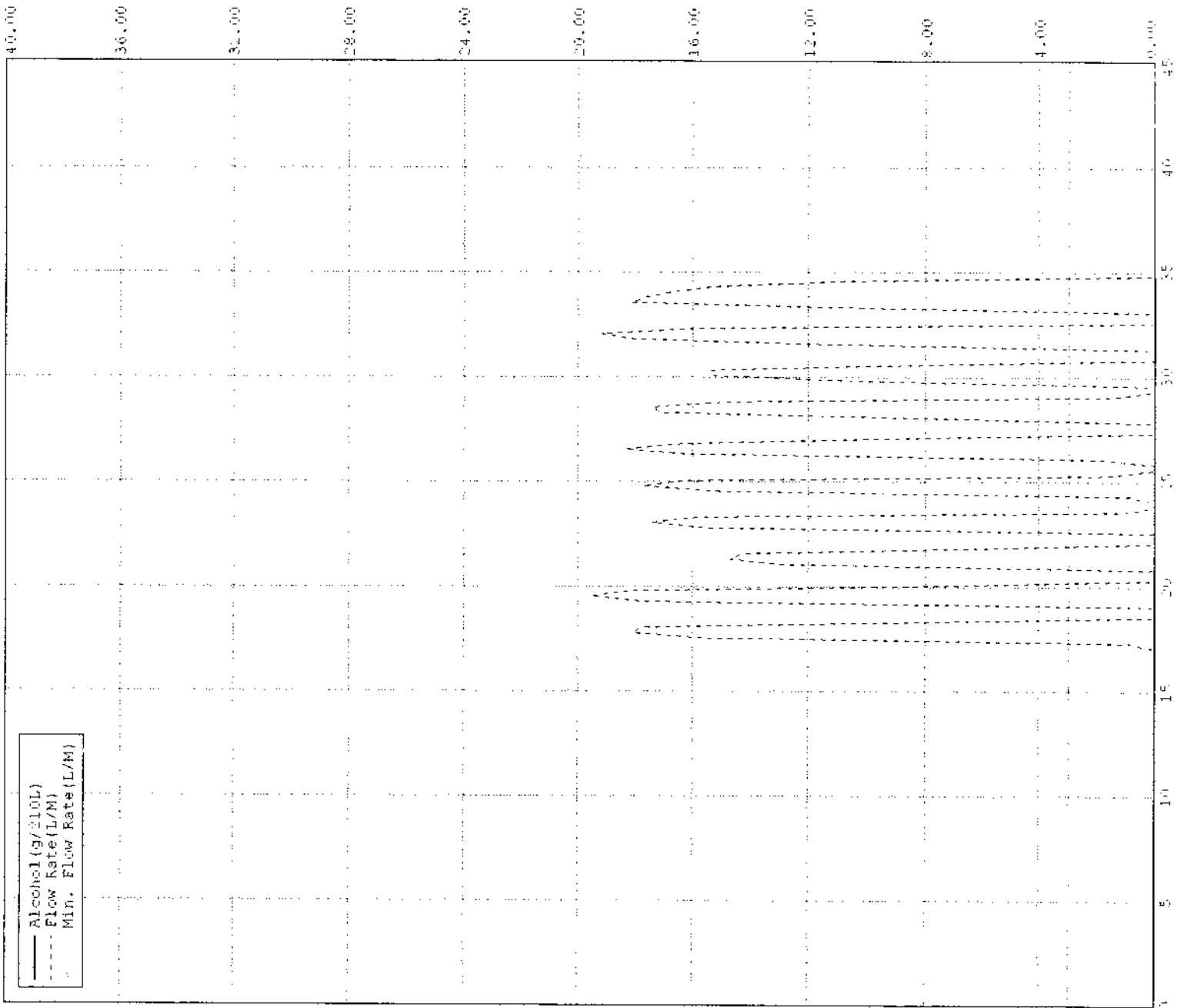
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:32
BLANK TEST	0.000	14:32
INTERNAL STANDARD	VERIFIED	14:32
EXTERNAL STANDARD	0.080	14:32
BLANK TEST	0.000	14:33
SUBJECT SAMPLE	XXX	14:34

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 07/03/2017
Time: 14:36:13

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

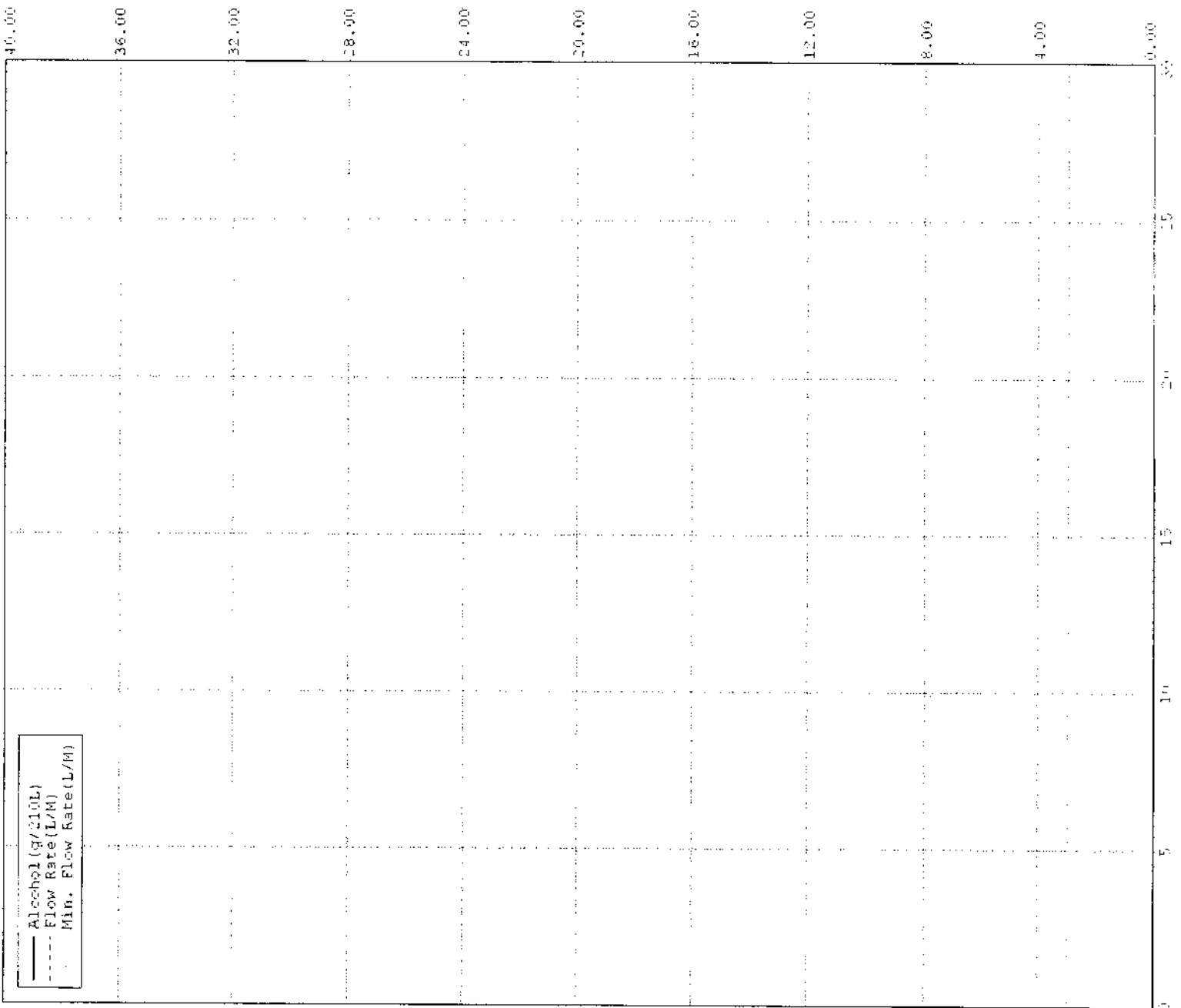
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:37
BLANK TEST 0.000 14:37
INTERNAL STANDARD VERIFIED 14:37
EXTERNAL STANDARD 0.080 14:37
BLANK TEST 0.000 14:38

RFI DETECTED

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 07/03/2017
Time: 14:50:40

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 29.80: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:52
BLANK TEST	0.000	14:52
INTERNAL STANDARD	VERIFIED	14:52
EXTERNAL STANDARD	0.079	14:52
BLANK TEST	0.000	14:53
SUBJECT SAMPLE (Vol=2.40L)	0.000	14:53
BLANK TEST	0.000	14:54
EXTERNAL STANDARD	0.080	14:54
BLANK TEST	0.000	14:55

MS

