

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 100586 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 1.6 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf AerGas Lot AG616504 Exp 06/13/18
- ii. 0.040g/210L Mnf AerGas Lot AG680101 Exp 10/27/18
- iii. 0.080g/210L Mnf AerGas Lot AG608504 Exp 03/25/18
- iv. 0.100g/210L Mnf AerGas Lot AG629304 Exp 10/19/18
- v. 0.200g/210L Mnf Both Lot 17090 Exp 2/24/19
 - 1. Simulator S/N SD1200 Date Calibrated 3/29/17
- vi. 0.300g/210L Mnf Both Lot 16410 Exp 12/19/18
 - 1. Simulator S/N DR4162 Date Calibrated 3/27/17

5. Functional Tests (attached)

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

- i. Acetone - Mnf Both Lot 16160 Level 0.100 Exp 2/19/18
 - 1. Simulator S/N DR4178 Date Calibrated 3/27/17
- ii. Isopropanol - Mnf Both Lot 17060 Level 0.100 Exp 2/14/19
 - 1. Simulator S/N SD1176 Date Calibrated 3/29/17
- iii. Negative Control - Mnf Both Lot 17280 Level 0.100 Exp 9/11/19
 - 1. Simulator S/N DR4176 Date Calibrated 3/28/17

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 10/17/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 10/12/2017
Time: 06:55:05

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.3°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.67 V PASSED
(1.00 V - 2.34 V)
Cooler Voltage = 1.66 V PASSED
(1.01 V - 2.35 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 529 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.972 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 PASSED

Xq = 0.092 0.67% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100386

Date: 10/12/2017

Time: 1:04 PM

Temperatures (°C)

Sample Cell: 49.4°C

Breath Tube: 47.3°C

Current Barometer 29.7 in

Volume (Ltr) 1.53

Settings

Lamp: 1.66 V

Bias: 80 V

Cooler: 1.66 V

Chopper: 517 Hz

Voltages (V)

Flow: 1.06 V

Detector: 0.000 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 05/01/2015
Time: 11:38:05

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

Ca = 0.1000
CAL = 0.966252 0.800 <= CAL < 1.200
b1 = 0.0008 0.0000 <= b1 < 0.0040
b2 = 0.0057 0.0010 <= b2 < 0.0100
b3 = 0.0006 0.0000 <= b3 < 0.0040
Xq = 0.0918 0.0500 <= Xq < 0.2000
a21 = 1.179077 1.050 <= a21 < 1.300
a31 = 0.553536 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 10/12/2017
Time: 13:22:38

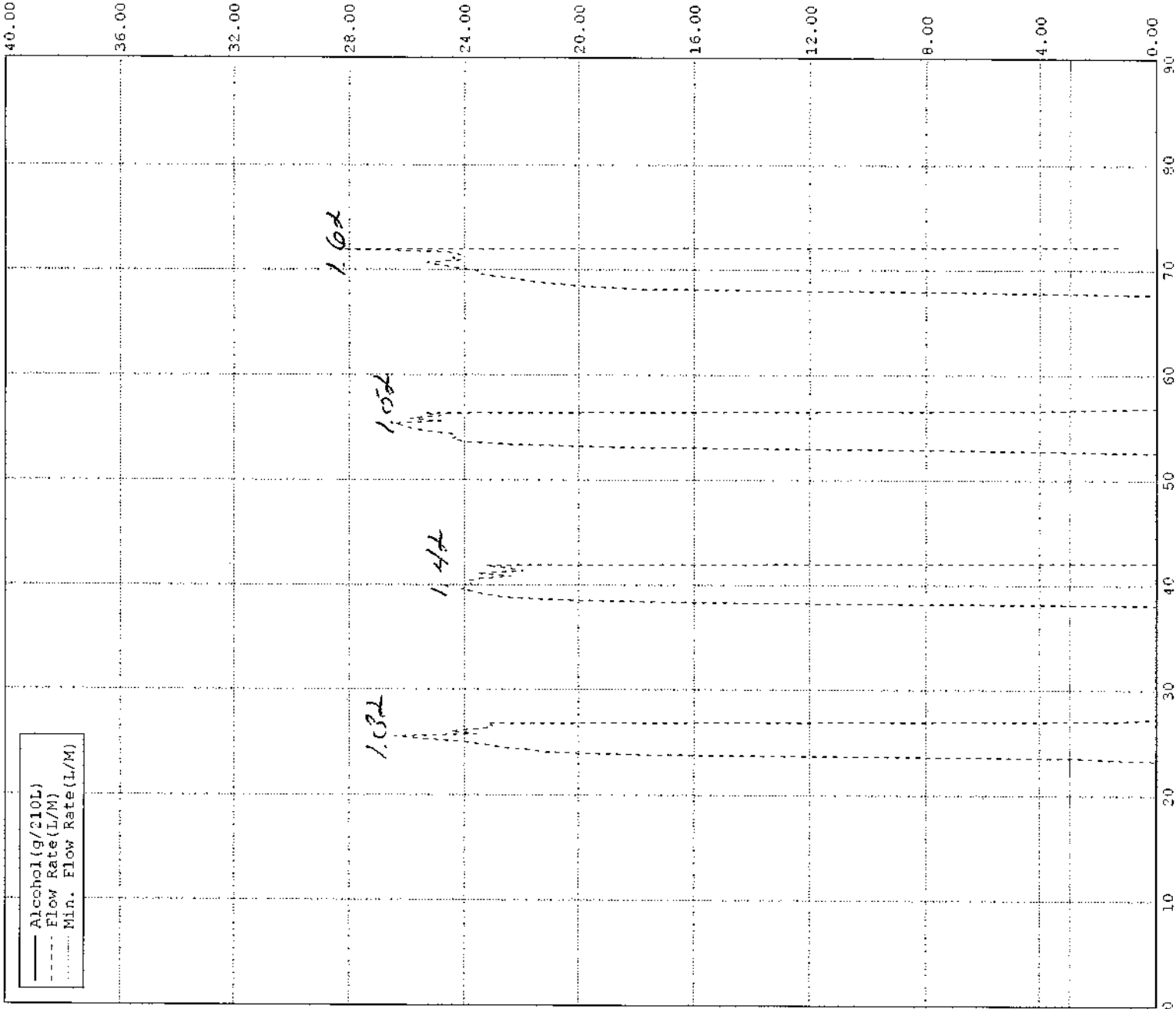
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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 29.72: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:24
BLANK TEST	0.000	13:24
INTERNAL STANDARD	VERIFIED	13:24
EXTERNAL STANDARD	0.078	13:24
BLANK TEST	0.000	13:25
SUBJECT SAMPLE (Vol=1.59L)	0.000	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.078	13:28
BLANK TEST	0.000	13:29



LINEARITY CHECK

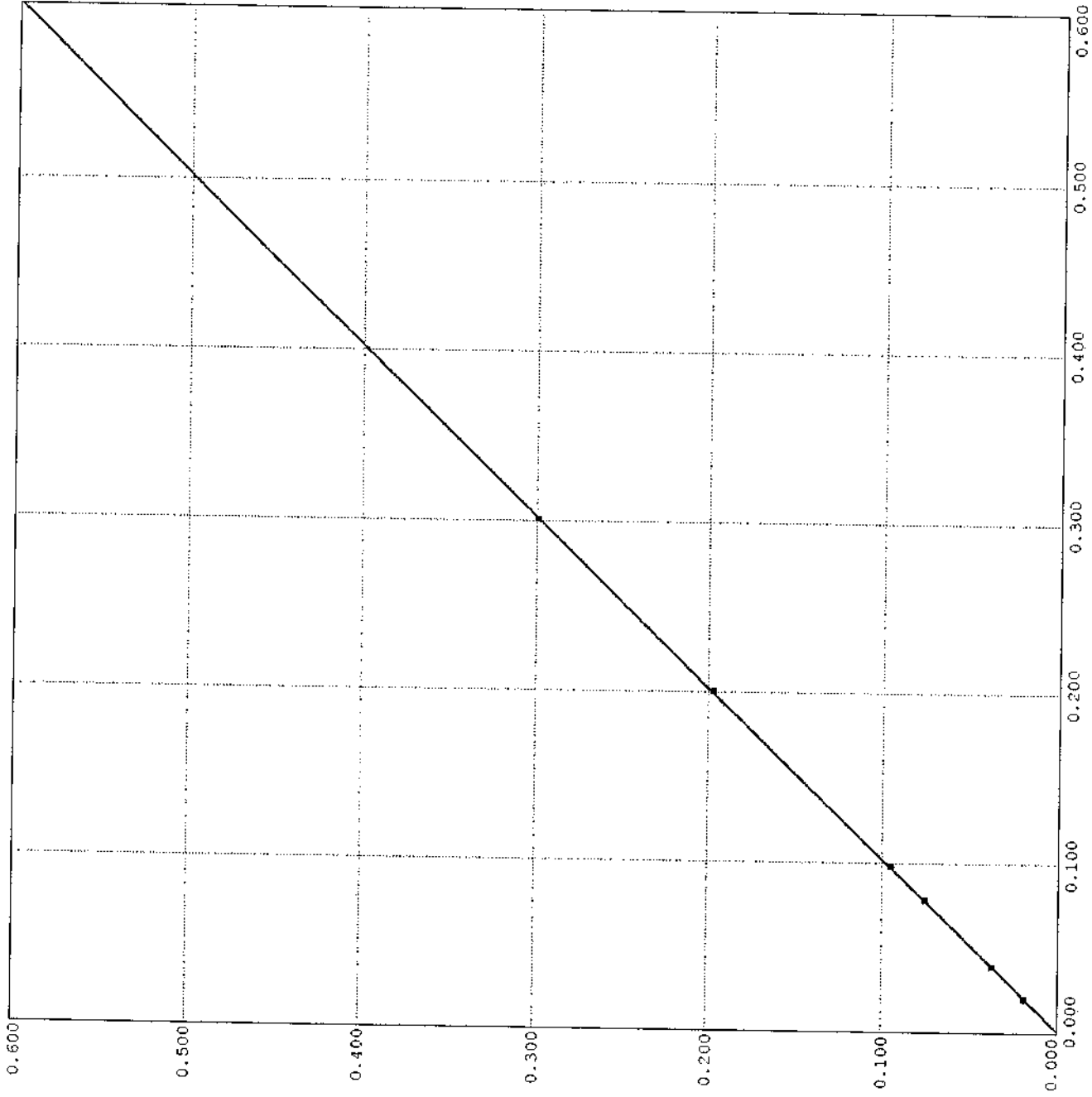
Alaska Department of Public Safety
 DATAMASTER dmt: 100386

Date: 10/17/2017
 Time: 07:57:27

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.039	0.0384	0.0005
0.078	0.0766	0.0005
0.098	0.0960	0.0000
0.200	0.1980	0.0007
0.300	0.3000	0.0010

SLOPE = 1.000467
 R² = 0.999932



OB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100386

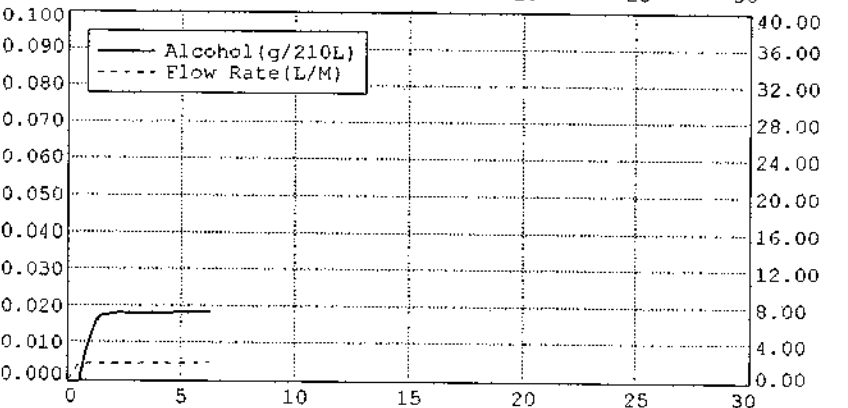
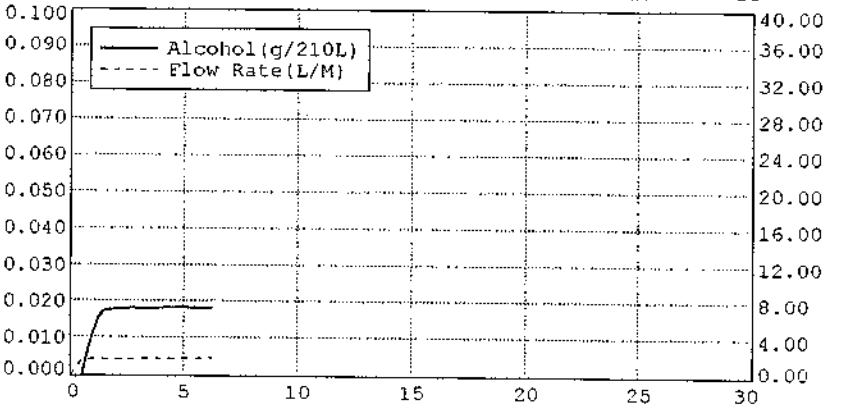
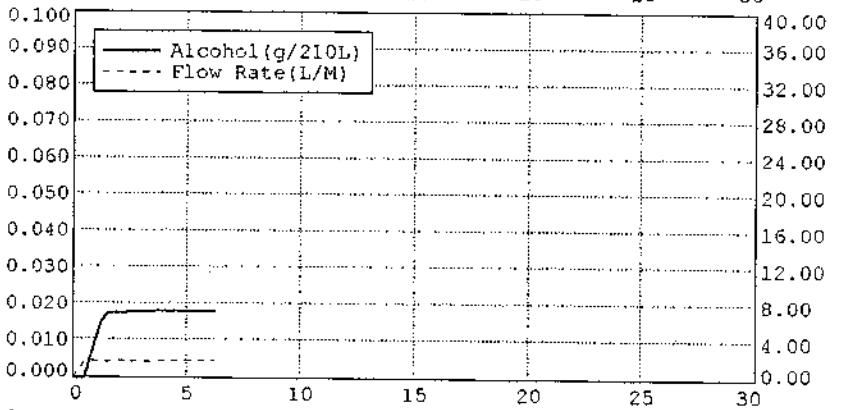
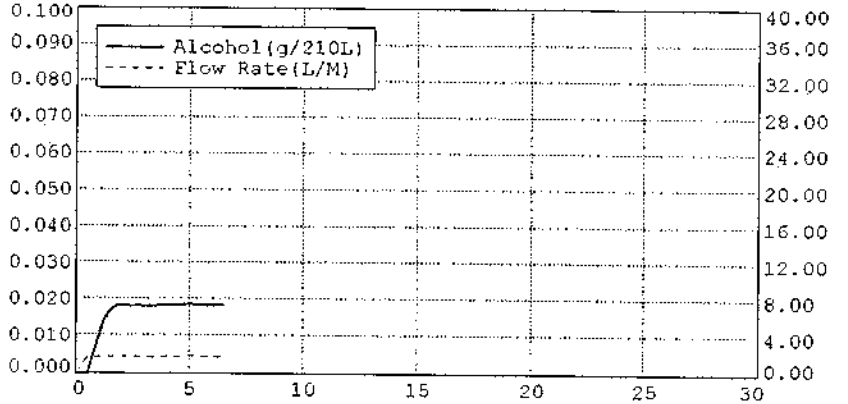
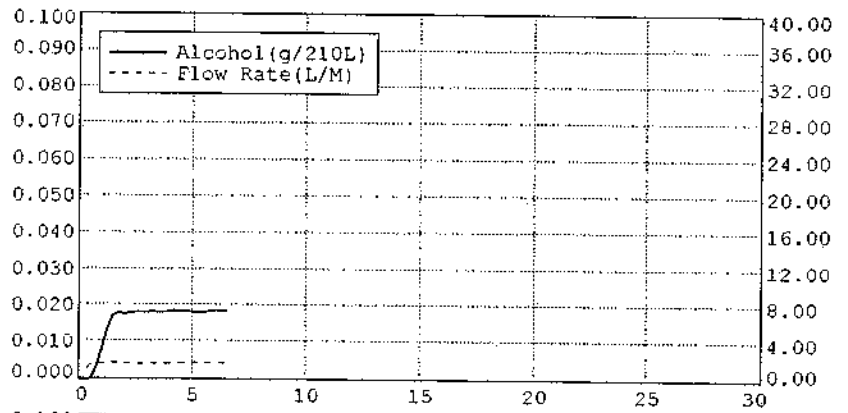
Date: 10/17/2017
 Time: 07:57:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.18: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 530 psi

BLANK TEST	0.000	07:58
INTERNAL STANDARD	VERIFIED	07:58
EXTERNAL STANDARD	0.020	07:59
BLANK TEST	0.000	07:59
EXTERNAL STANDARD	0.020	08:00
BLANK TEST	0.000	08:01
EXTERNAL STANDARD	0.019	08:01
BLANK TEST	0.000	08:02
EXTERNAL STANDARD	0.020	08:02
BLANK TEST	0.000	08:03
EXTERNAL STANDARD	0.020	08:03
BLANK TEST	0.000	08:04

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100386

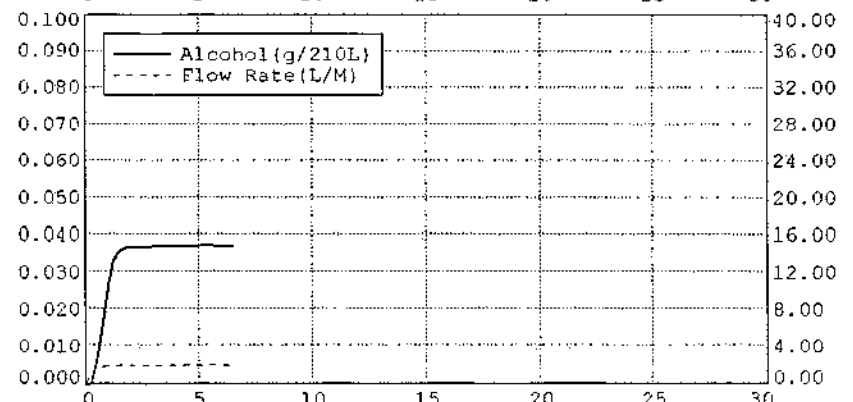
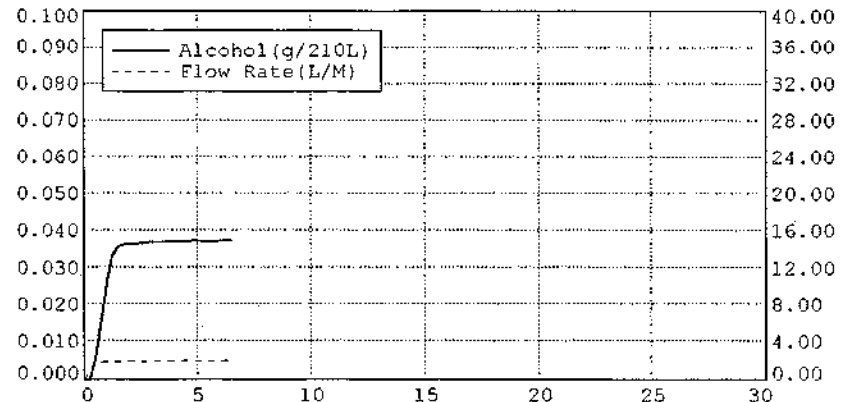
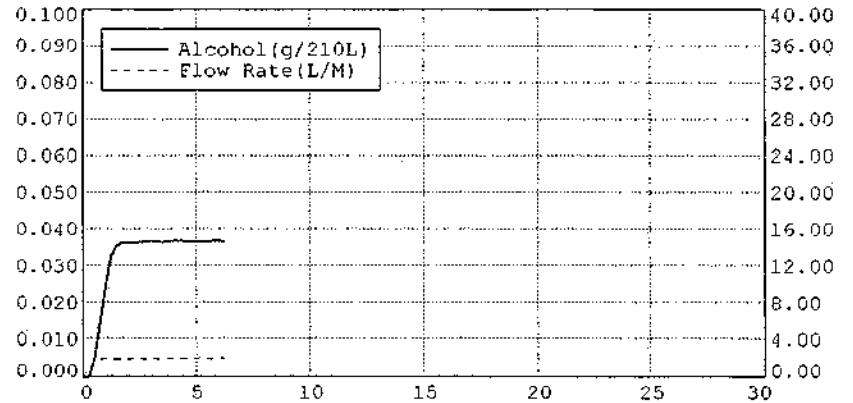
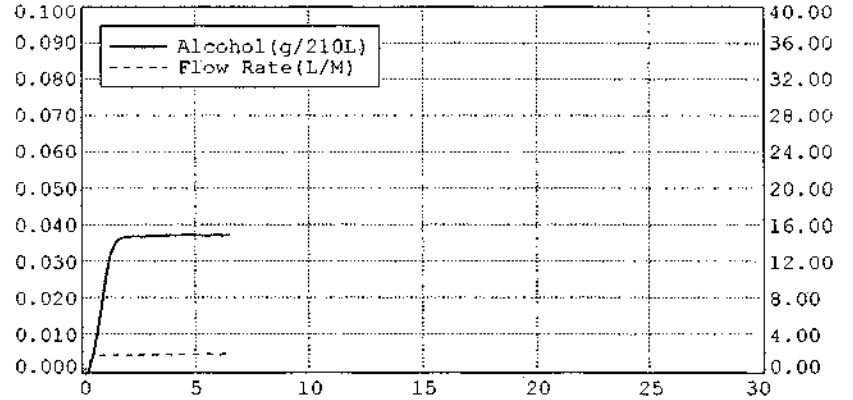
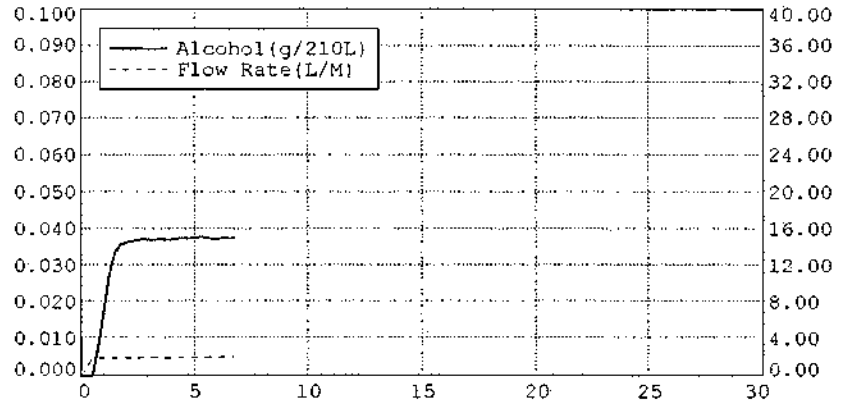
Date: 10/17/2017
 Time: 08:04:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.18: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 616 psi

BLANK TEST	0.000	08:06
INTERNAL STANDARD	VERIFIED	08:06
EXTERNAL STANDARD	0.039	08:06
BLANK TEST	0.000	08:07
EXTERNAL STANDARD	0.039	08:07
BLANK TEST	0.000	08:08
EXTERNAL STANDARD	0.038	08:08
BLANK TEST	0.000	08:09
EXTERNAL STANDARD	0.038	08:09
BLANK TEST	0.000	08:10
EXTERNAL STANDARD	0.038	08:10
BLANK TEST	0.000	08:11

Average = 0.0384
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100386

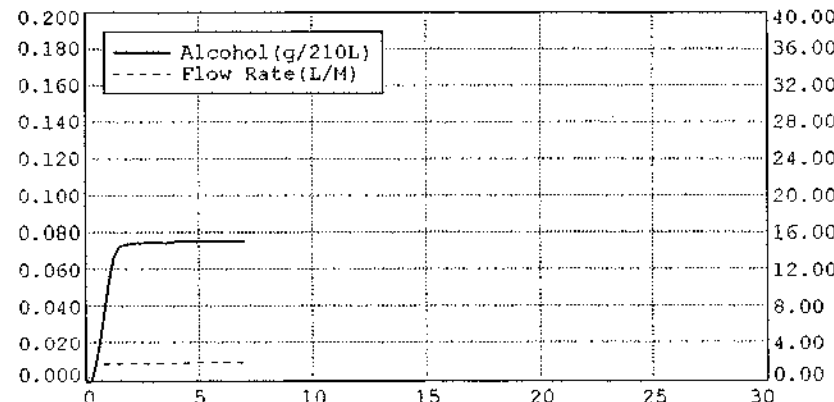
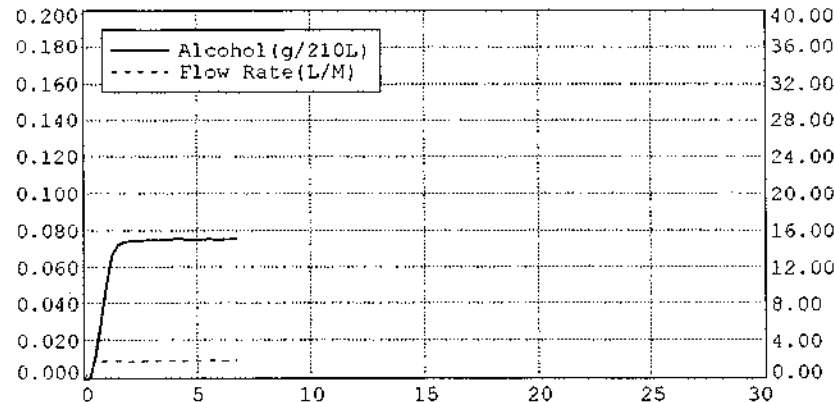
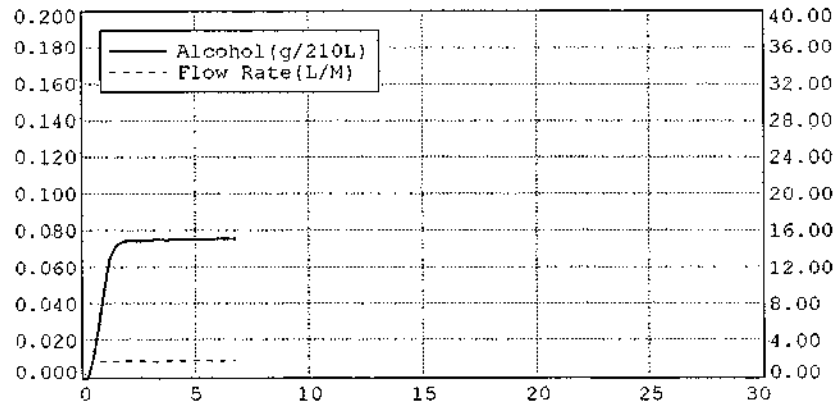
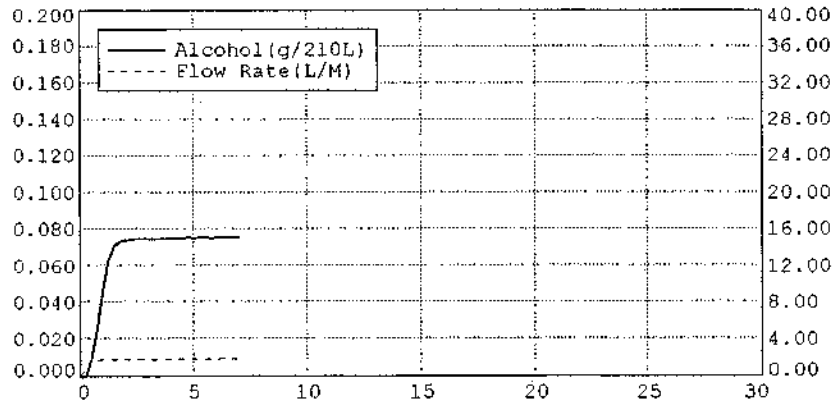
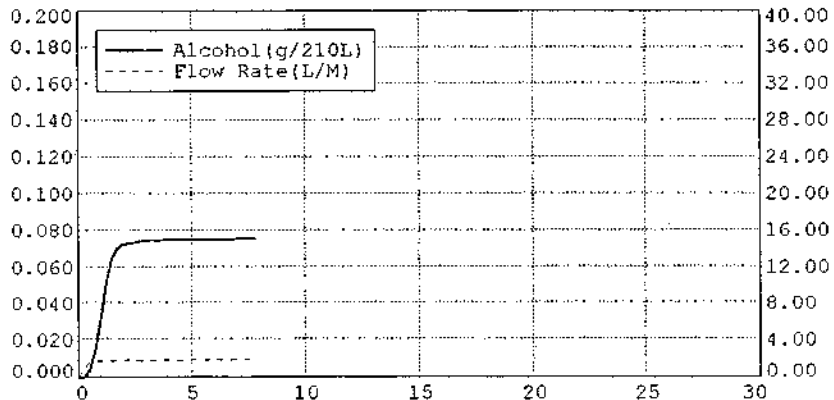
Date: 10/17/2017
 Time: 08:12:15

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.17: 0.078
 LOT #: AG608504
 EXPIRATION: 03/25/2018
 TANK PRESSURE: 467 psi

BLANK TEST	0.000	08:13
INTERNAL STANDARD	VERIFIED	08:13
EXTERNAL STANDARD	0.076	08:13
BLANK TEST	0.000	08:14
EXTERNAL STANDARD	0.076	08:14
BLANK TEST	0.000	08:15
EXTERNAL STANDARD	0.077	08:16
BLANK TEST	0.000	08:16
EXTERNAL STANDARD	0.077	08:17
BLANK TEST	0.000	08:18
EXTERNAL STANDARD	0.077	08:18
BLANK TEST	0.000	08:19

Average = 0.0766
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100386

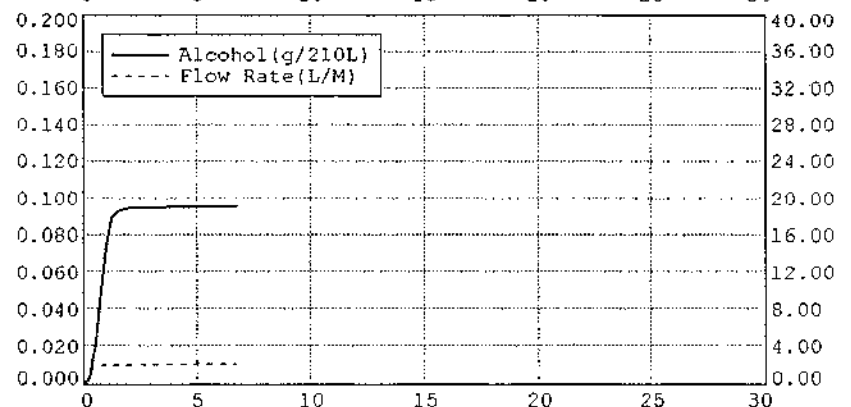
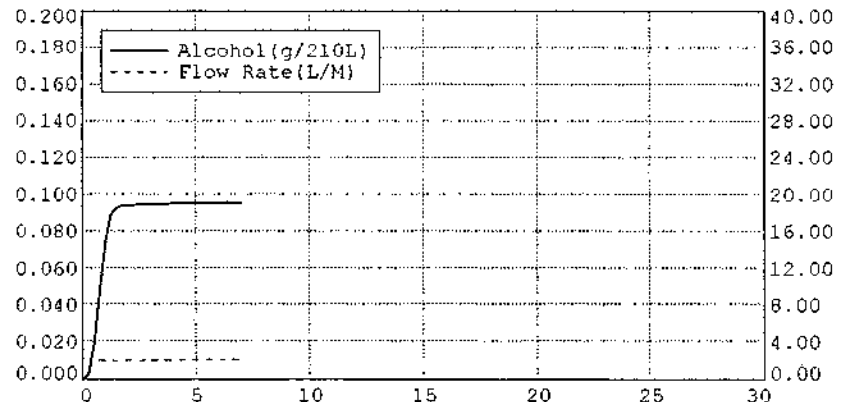
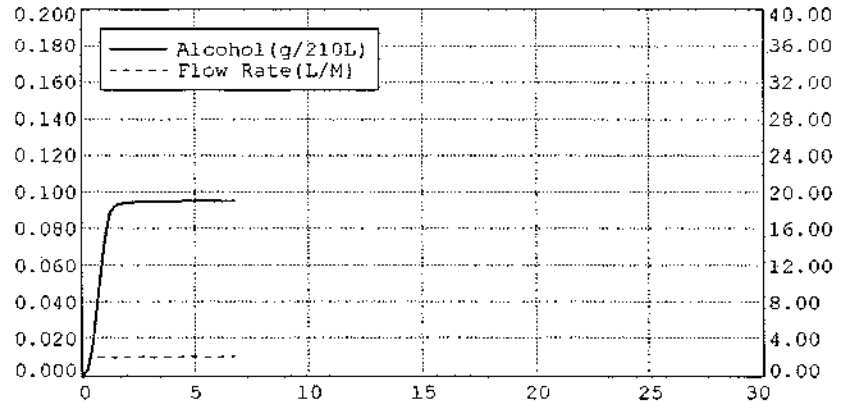
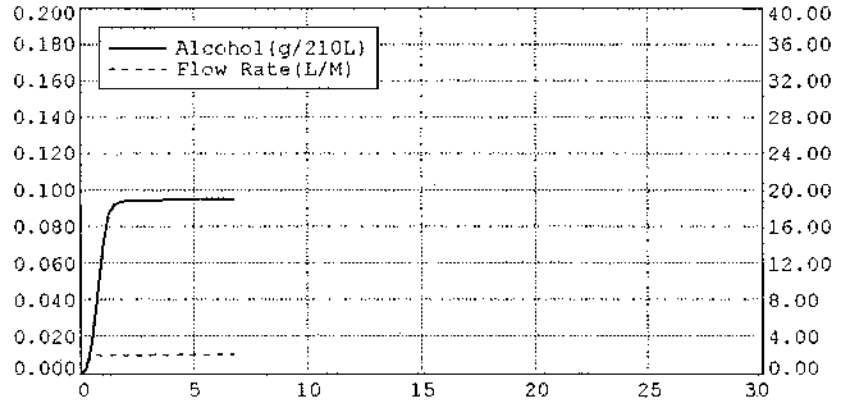
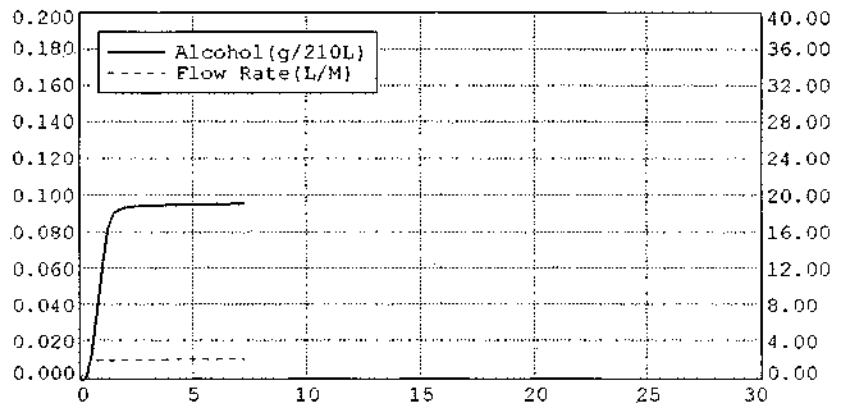
Date: 10/17/2017
 Time: 08:19:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.18: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 765 psi

BLANK TEST	0.000	08:20
INTERNAL STANDARD	VERIFIED	08:21
EXTERNAL STANDARD	0.096	08:21
BLANK TEST	0.000	08:22
EXTERNAL STANDARD	0.096	08:22
BLANK TEST	0.000	08:23
EXTERNAL STANDARD	0.096	08:23
BLANK TEST	0.000	08:24
EXTERNAL STANDARD	0.096	08:24
BLANK TEST	0.000	08:25
EXTERNAL STANDARD	0.096	08:25
BLANK TEST	0.000	08:26

Average = 0.0960
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

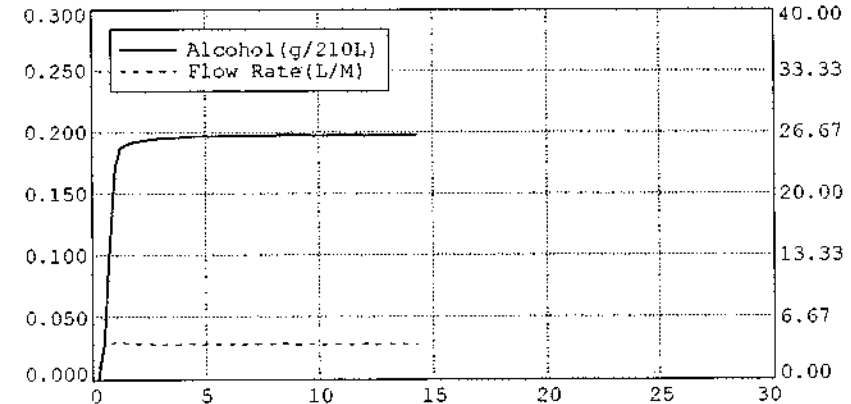
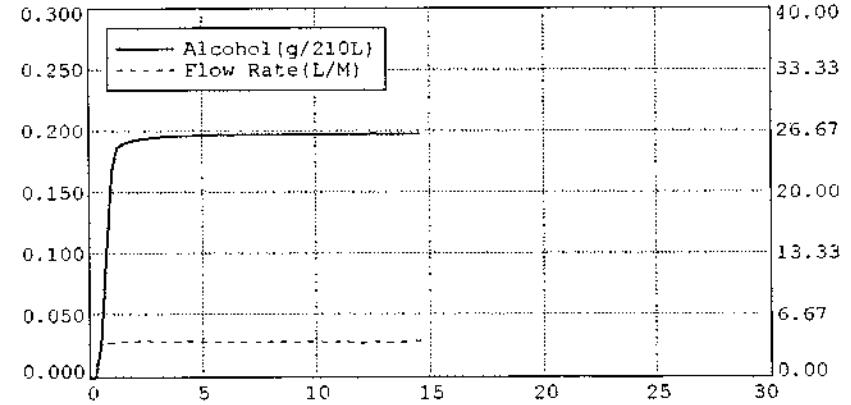
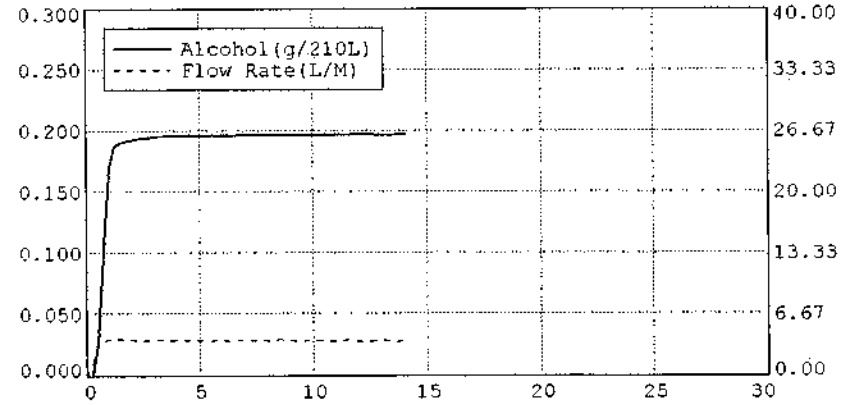
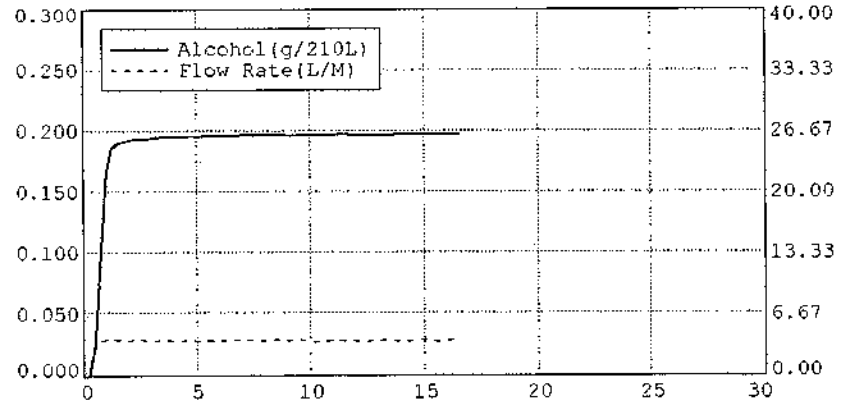
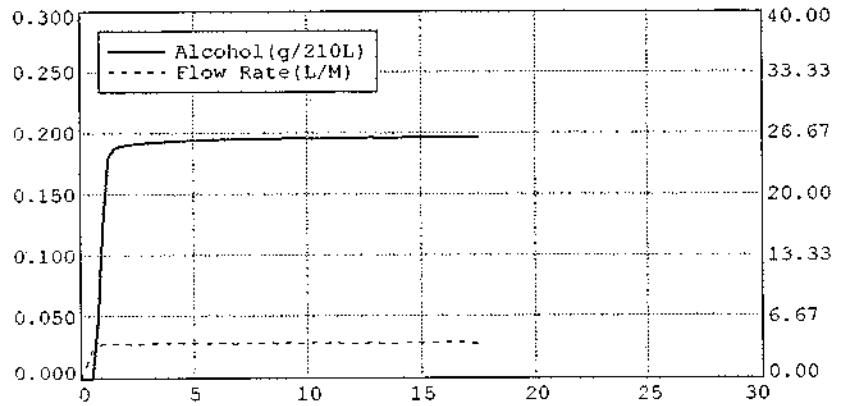
Alaska Department of Public Safety
 DATAMASTER dmt: 100386

Date: 10/17/2017
 Time: 08:28:02

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

BLANK TEST	0.000	08:29
INTERNAL STANDARD	VERIFIED	08:29
EXTERNAL STANDARD	0.197	08:29
BLANK TEST	0.000	08:30
EXTERNAL STANDARD	0.198	08:31
BLANK TEST	0.000	08:32
EXTERNAL STANDARD	0.198	08:32
BLANK TEST	0.000	08:33
EXTERNAL STANDARD	0.198	08:33
BLANK TEST	0.000	08:34
EXTERNAL STANDARD	0.199	08:34
BLANK TEST	0.000	08:35

Average = 0.1980
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100386

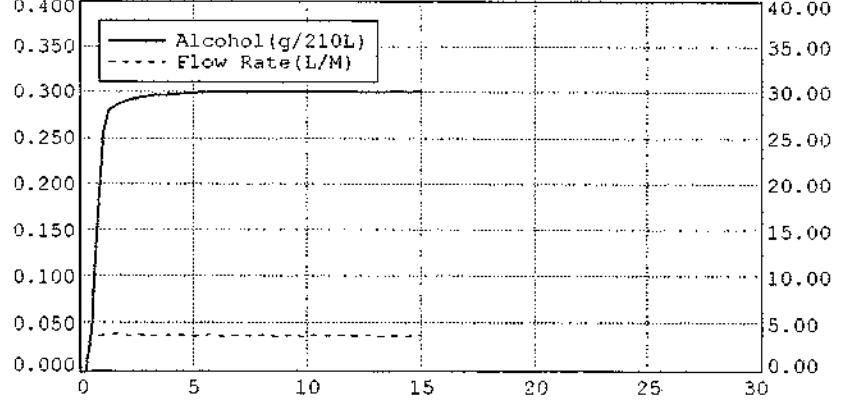
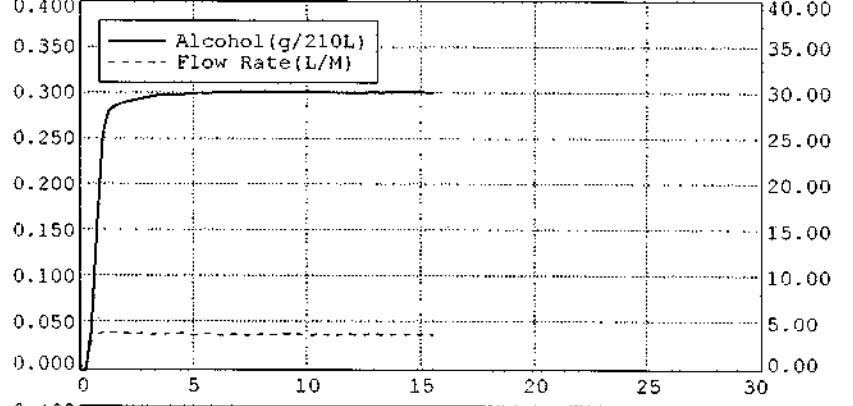
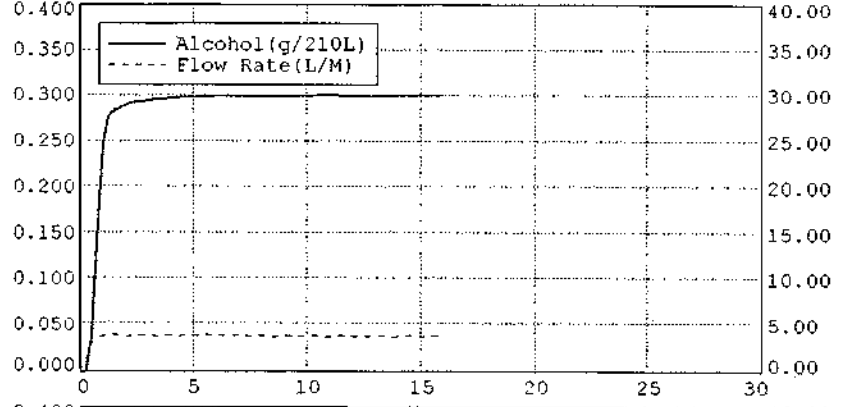
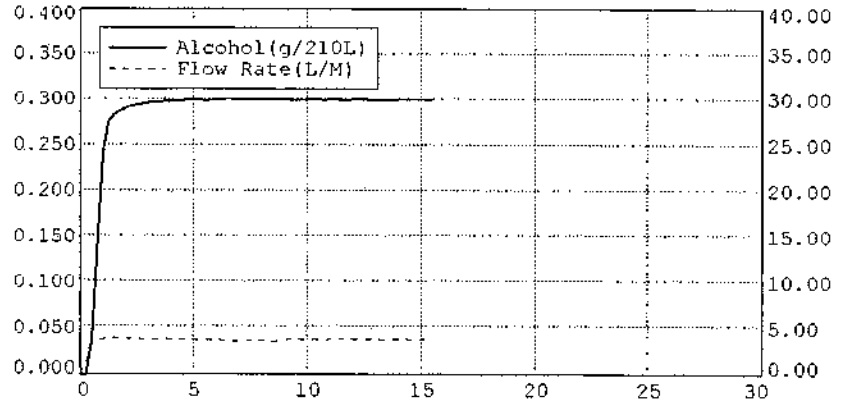
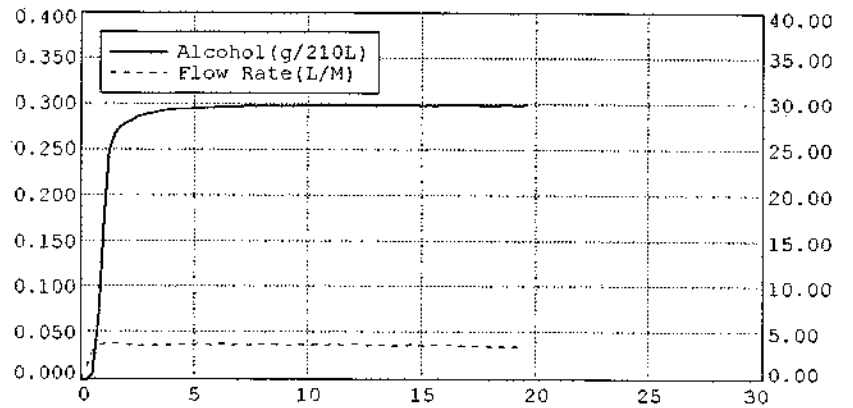
Date: 10/17/2017
 Time: 08:40:47

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 16410
 EXPIRATION: 12/19/2018

BLANK TEST	0.000	08:41
INTERNAL STANDARD	VERIFIED	08:42
EXTERNAL STANDARD	0.299	08:42
BLANK TEST	0.000	08:43
EXTERNAL STANDARD	0.299	08:43
BLANK TEST	0.000	08:44
EXTERNAL STANDARD	0.300	08:45
BLANK TEST	0.000	08:45
EXTERNAL STANDARD	0.301	08:46
BLANK TEST	0.000	08:47
EXTERNAL STANDARD	0.301	08:47
BLANK TEST	0.000	08:48

Average = 0.3000
 Std Dev = 0.0010



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 10/17/2017
Time: 09:21:51

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

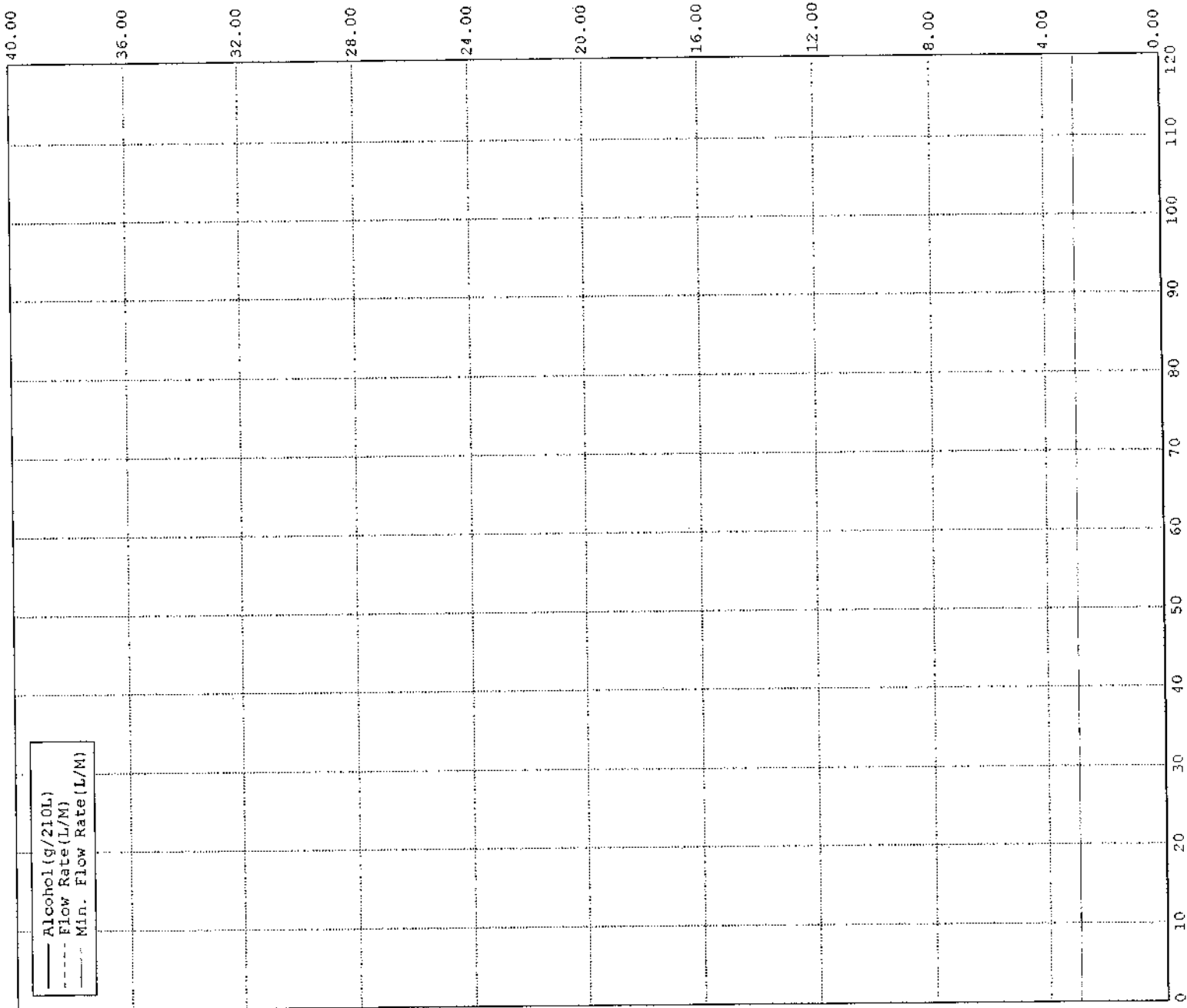
DEPT/AGENCY:

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 09:44
BLANK TEST 0.000 09:44
INTERNAL STANDARD VERIFIED 09:44
EXTERNAL STANDARD 0.077 09:45
BLANK TEST 0.000 09:46
SUBJECT SAMPLE INCOMPLETE 09:48



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 10/17/2017
Time: 09:51:52

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

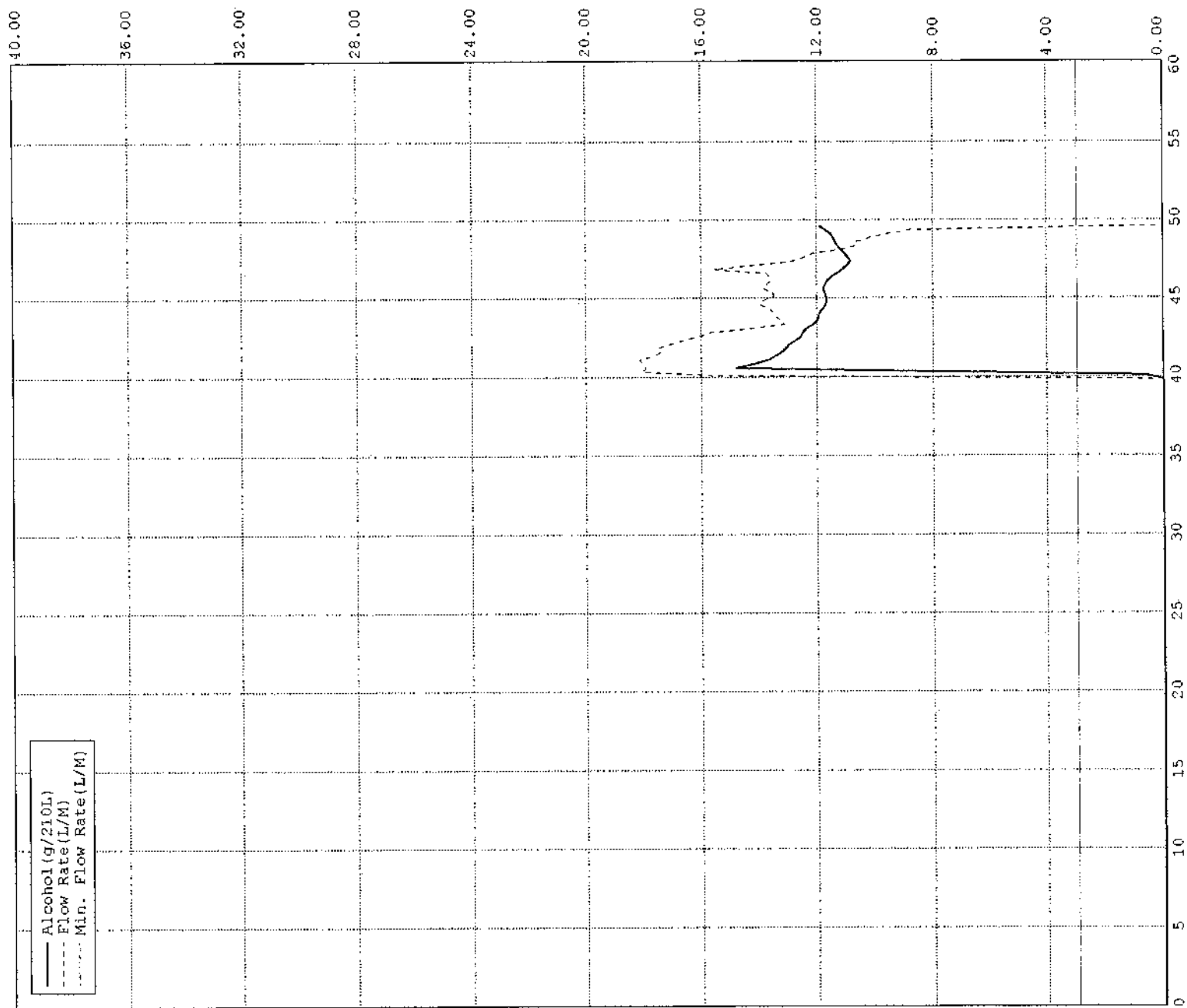
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 09:54
BLANK TEST 0.000 09:55
INTERNAL STANDARD VERIFIED 09:55
EXTERNAL STANDARD 0.076 09:55
BLANK TEST 0.000 09:56
SUBJECT SAMPLE INVALID 09:57

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 10/17/2017
Time: 08:57:29

SUBJECT NAME:
TEST TEST
LICENSE #: INT- ACETONE

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

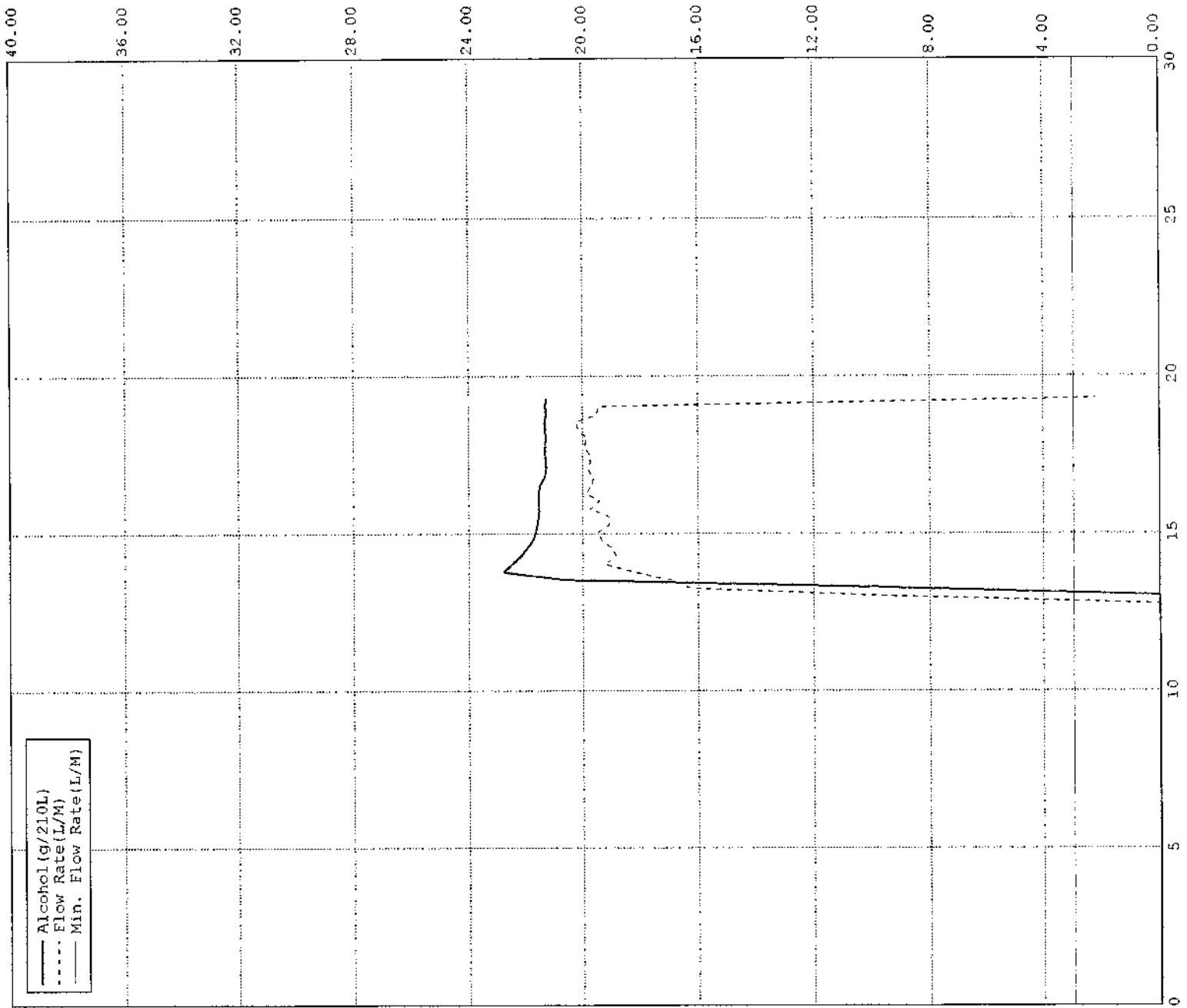
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.16: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:58
BLANK TEST	0.000	08:58
INTERNAL STANDARD	VERIFIED	08:59
Xq = 0.093 (1.05%)		
EXTERNAL STANDARD	0.076	08:59
X[1] = 0.0759 (0.0000) (0.0030)		
BLANK TEST	0.000	09:00
SUBJECT SAMPLE	XXX	09:00
X[1] = 0.1070 (-0.0126) (0.0037)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 10/17/2017
Time: 09:06:21

SUBJECT NAME:
TEST TEST
LICENSE #: INT- IPA

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

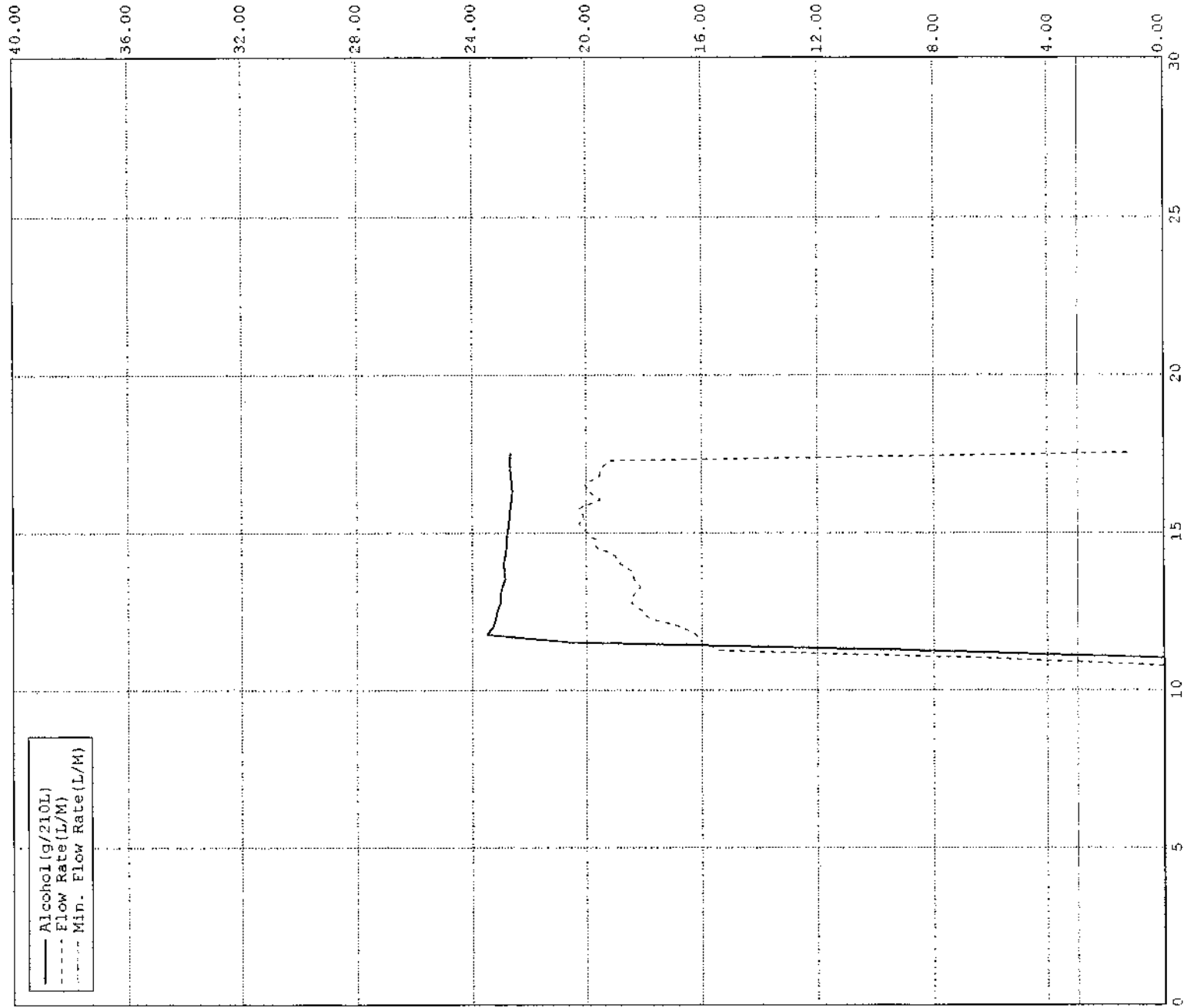
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

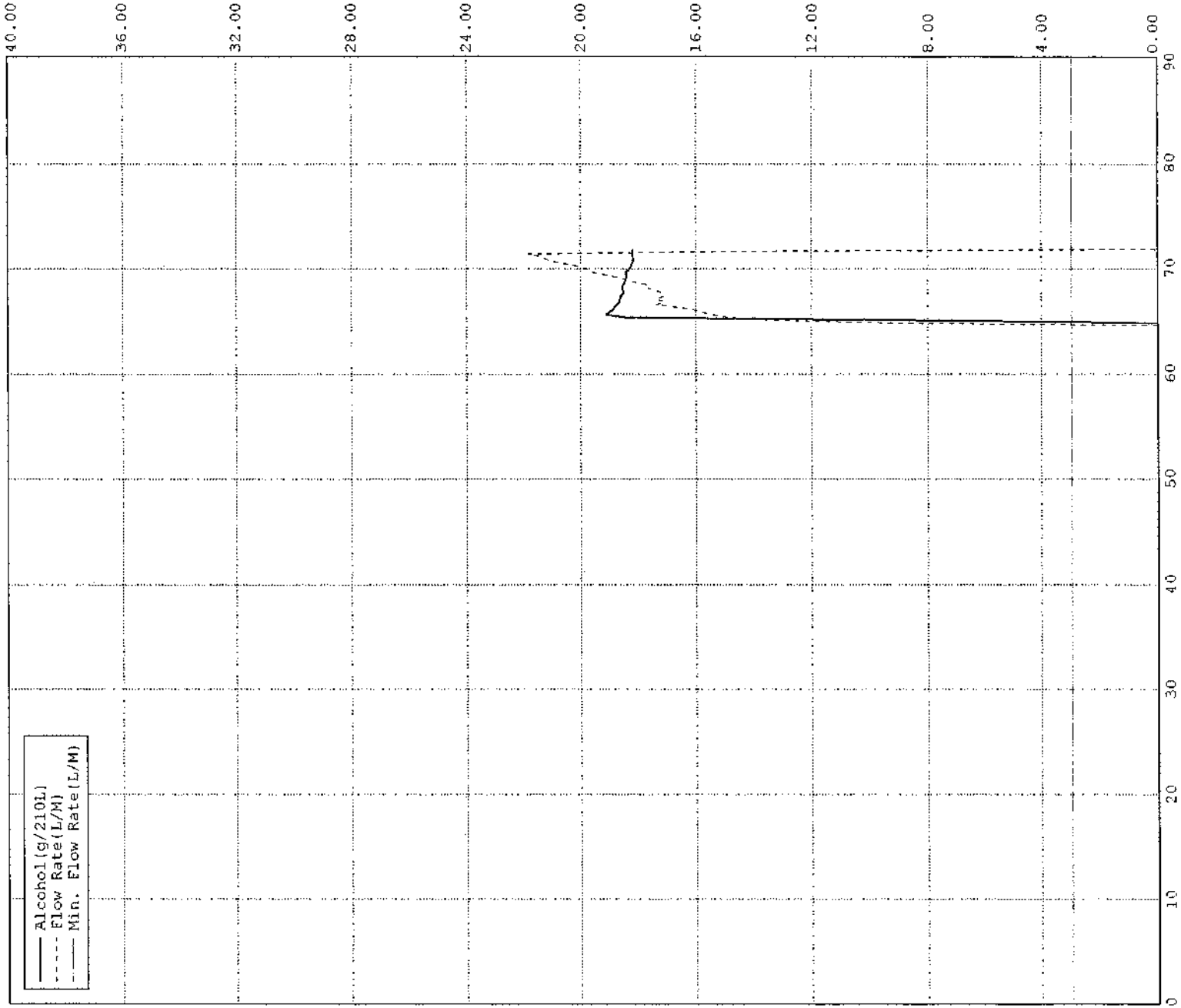
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.16: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 09:07
BLANK TEST 0.000 09:07
INTERNAL STANDARD VERIFIED 09:07
Xq = 0.092 (0.67%)
EXTERNAL STANDARD 0.076 09:07
X[1] = 0.0760 (-0.0002) (0.0028)
BLANK TEST 0.000 09:08
SUBJECT SAMPLE XXX 09:09
X[1] = 0.1131 (-0.0226) (0.0012)

Interference Detected

MSB





SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100386

Date: 10/17/2017
 Time: 09:11:48

SUBJECT NAME:
TEST TEST
LICENSE #: INT- NEGATIV

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

DEPT/AGENCY:
 AAAA

CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.16: 0.078
 LOT #: AG608504
 EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	09:13
BLANK TEST	0.000	09:13
INTERNAL STANDARD	VERIFIED	09:13
Xq = 0.093 (0.86%)		
EXTERNAL STANDARD	0.076	09:13
X[1] = 0.0765 (0.0000) (0.0028)		
BLANK TEST	0.000	09:14
SUBJECT SAMPLE (Vol=2.06L)	0.091	09:16
X[1] = 0.0915 (0.0010) (0.0010)		
BLANK TEST	0.000	09:16
EXTERNAL STANDARD	0.076	09:17
X[1] = 0.0762 (0.0003) (0.0023)		
BLANK TEST	0.000	09:18

Filter 2 = 0.0000
Filter 3 = 0.0007

ROS

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 10/17/2017
Time: 10:02:48

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

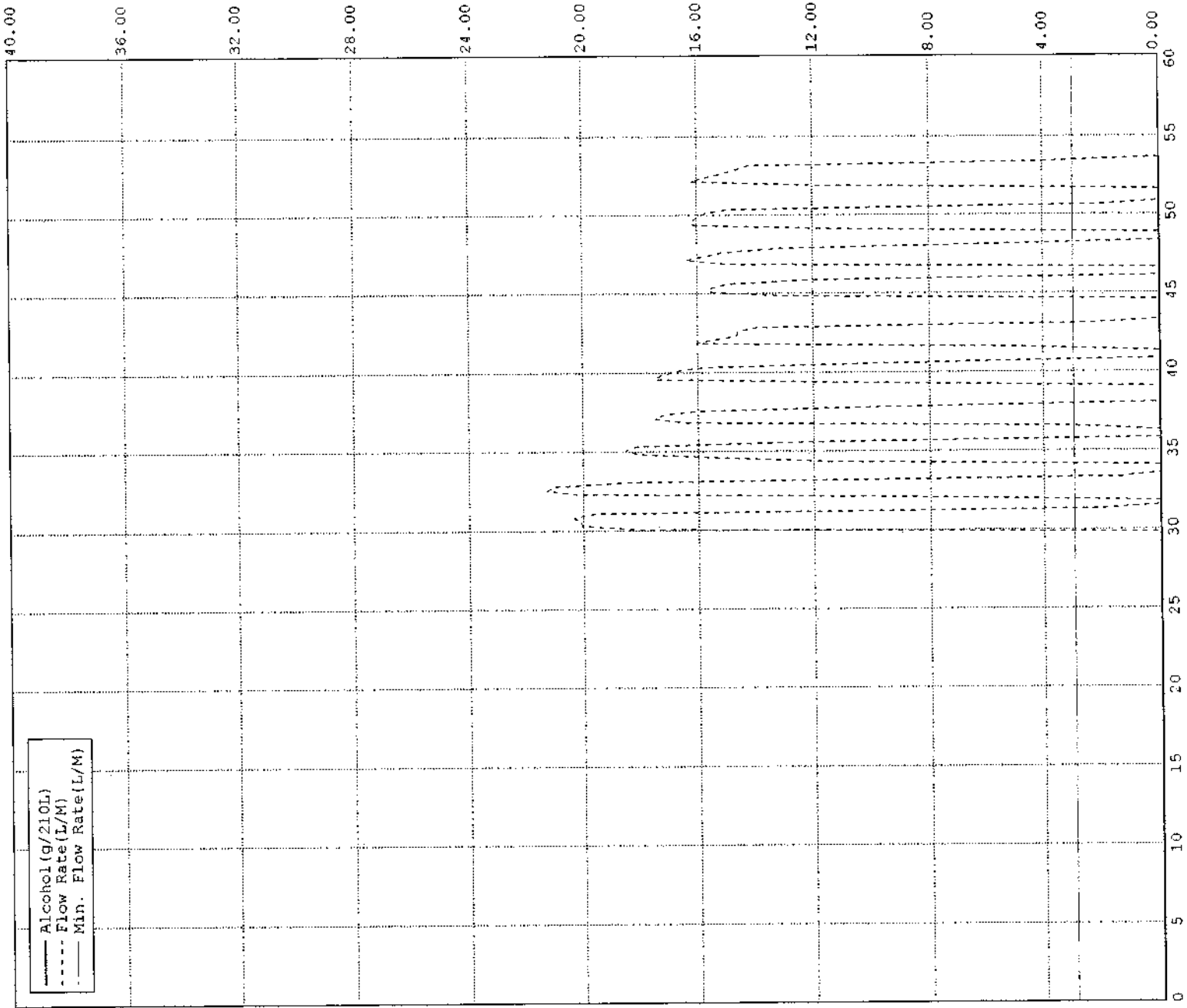
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	10:07
BLANK TEST	0.000	10:07
INTERNAL STANDARD	VERIFIED	10:07
EXTERNAL STANDARD	0.077	10:07
BLANK TEST	0.000	10:08
SUBJECT SAMPLE	XXX	10:09

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 10/17/2017
Time: 10:12:07

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

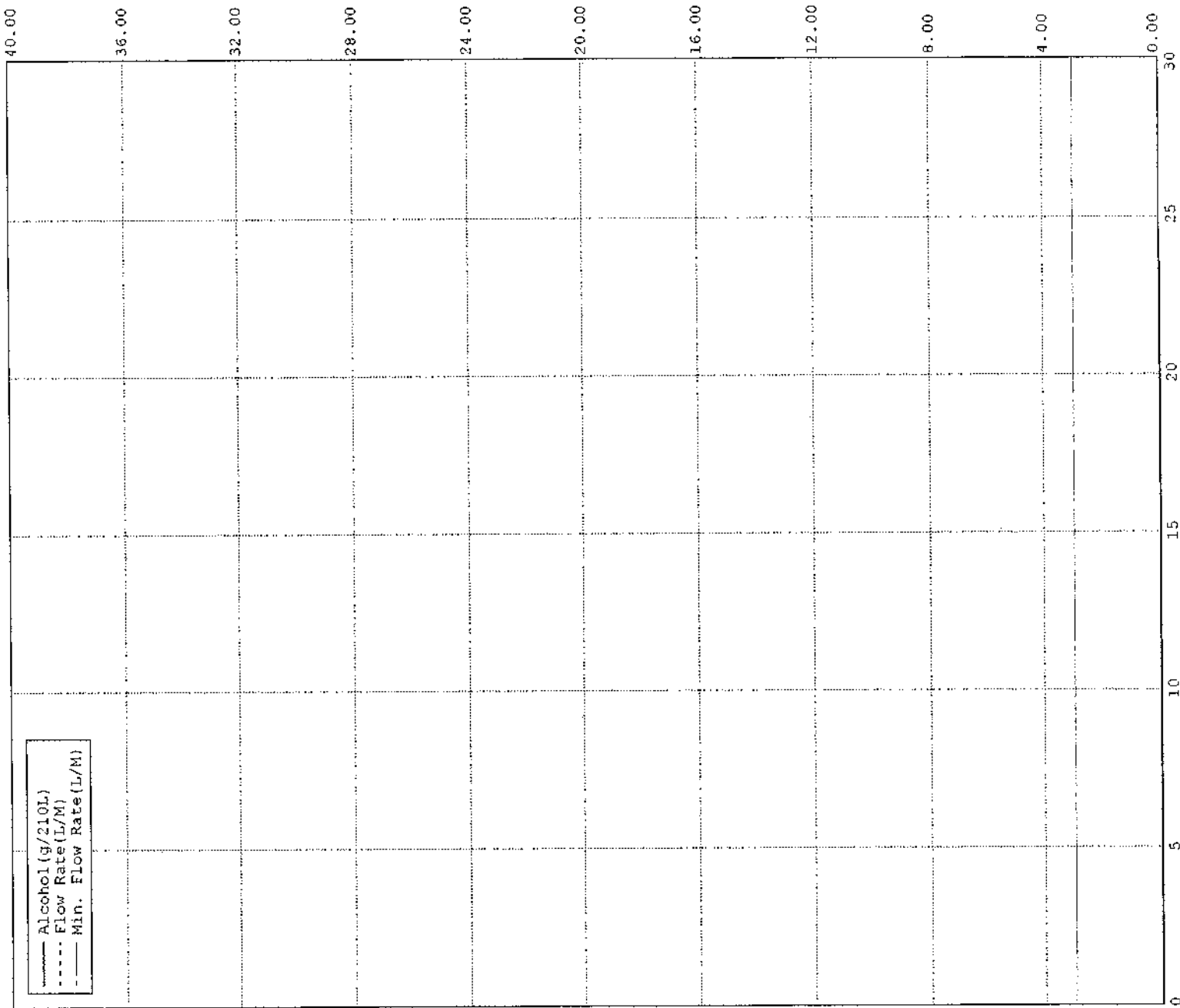
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 10:13
BLANK TEST 0.000 10:13
INTERNAL STANDARD VERIFIED 10:13
EXTERNAL STANDARD 0.077 10:14
BLANK TEST 0.000 10:15

RFI DETECTED

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100386

Date: 10/17/2017
Time: 10:28:25

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 29.15: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	10:30
BLANK TEST	0.000	10:30
INTERNAL STANDARD	VERIFIED	10:30
EXTERNAL STANDARD	0.077	10:30
BLANK TEST	0.000	10:31
SUBJECT SAMPLE (Vol=1.82L)	0.000	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.077	10:33
BLANK TEST	0.000	10:33

CAS

