

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 100351 Analyst C.O. Bryant Start Date 3/20/18

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 avgas Lot AG616504 Exp 6/13/18
- ii. 0.040g/210L Mnf avgas Lot AG630101 Exp 10/27/18
- iii. 0.080g/210L Mnf avgas Lot AG634001 Exp 12/5/18
- iv. 0.100g/210L Mnf avgas Lot AG629304 Exp 10/19/18
- v. 0.200g/210L Mnf guth Lot 17090 Exp 2/24/19
 - 1. Simulator S/N DR4161 Date Calibrated 1/24/18
- vi. 0.300g/210L Mnf guth Lot 17140 Exp 6/15/19
 - 1. Simulator S/N SD1198 Date Calibrated 1/23/18

5. Functional Tests (attached)

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

- i. Acetone - Mnf guth Lot 17280 Level 0.100 Exp 9/11/19
 - 1. Simulator S/N SD1177 Date Calibrated 1/24/18
- ii. Isopropanol - Mnf guth Lot 17280 Level 0.100 Exp 9/11/19
 - 1. Simulator S/N SD1199 Date Calibrated 1/24/18
- iii. Negative Control - Mnf guth Lot 17060 Level 0.100 Exp 2/14/19
 - 1. Simulator S/N SD1088 Date Calibrated 1/24/18

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 3/21/18

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 10:29:48

VERSIONS
DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 42.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.84 V PASSED
(1.10 V - 2.58 V)
Cooler Voltage = 1.81 V PASSED
(1.13 V - 2.63 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 5.167 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 V <= 0.010 V)
PUMP OFF PASSED
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.113 0.23% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100351

Date: 03/20/2018

Time: 10:46 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 44.6°C

Current Barometer 29.9 in

Volume (Ltr) 1.58

Settings

Lamp: 1.87 V

Bias: 80 V

Cooler: 1.81 V

Chopper: 530 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.067 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 06/30/2015
Time: 06:33:25

OPERATOR NAME:

M M M

CERTIFICATE #: GUTH 2100, DR7001, 34.0C

Ca = 0.1010

CAL = 0.994218 0.800 <= CAL < 1.200

b1 = 0.0000 0.0000 <= b1 < 0.0040

b2 = 0.0034 0.0010 <= b2 < 0.0100

b3 = 0.0000 0.0000 <= b3 < 0.0040

Xq = 0.1132 0.0500 <= Xq < 0.2000

a21 = 1.172976 1.050 <= a21 < 1.300

a31 = 0.463814 0.300 <= a31 < 0.800

DR7001 15040 34.0C
2/10/16

SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER chrt: 100351

Date: 03/20/2018

Time: 10:48:17

SUBJECT NAME:

TEST TEST

LICENSE #: VOLUME TEST

OPERATOR NAME:

COLLEEN S O'BRYAN

OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 18-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.92: 0.080

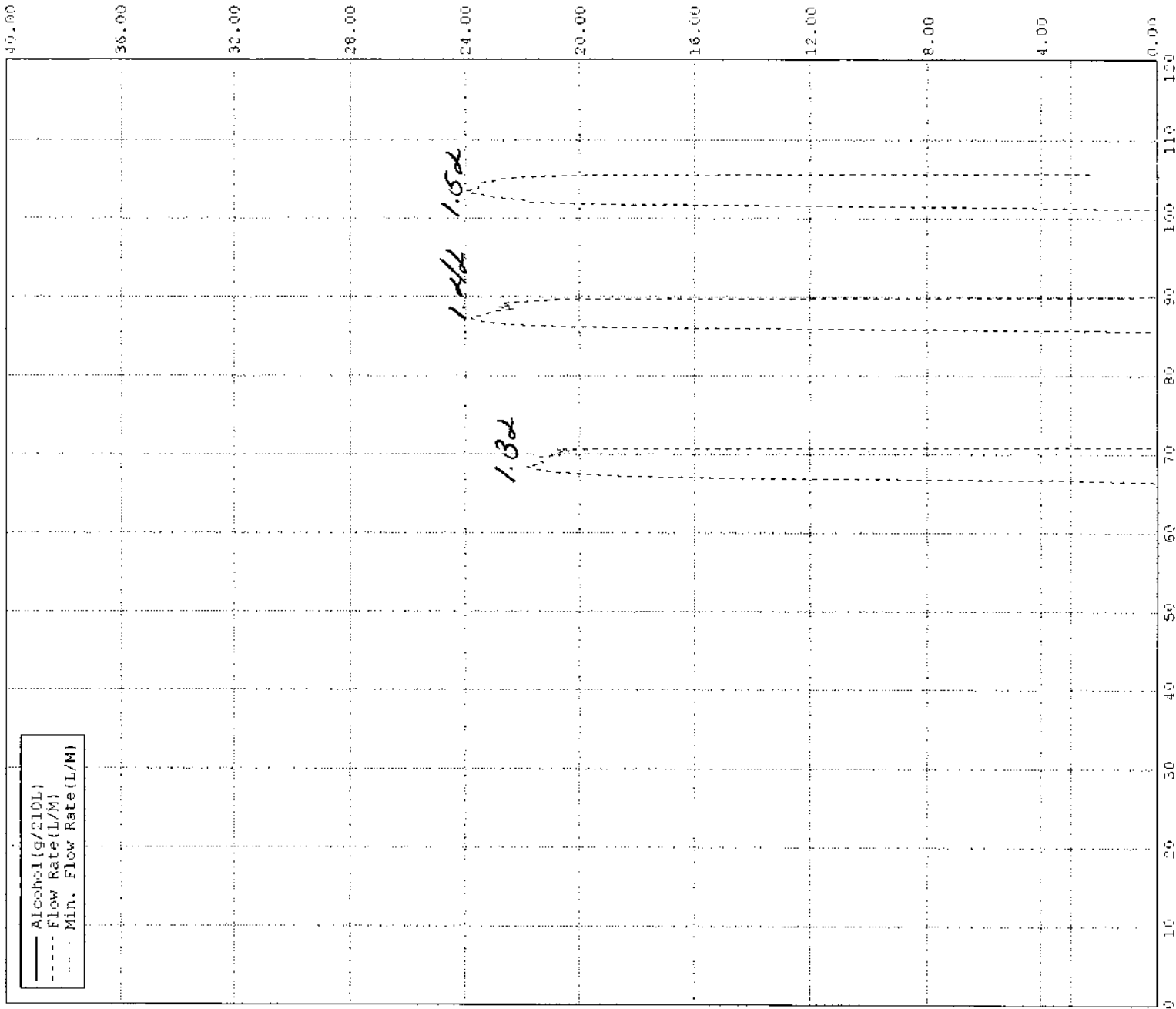
LOT #: AG634001

EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	10:49
BLANK TEST	0.000	10:49
INTERNAL STANDARD	VERIFIED	10:49
EXTERNAL STANDARD	0.081	10:50
BLANK TEST	0.000	10:51
SUBJECT SAMPLE (Vol=1.54L)	0.000	10:52
BLANK TEST	0.000	10:53
EXTERNAL STANDARD	0.081	10:53
BLANK TEST	0.000	10:54

CB

Alcohol(g/210L)
Flow Rate(L/M)
Min. Flow Rate(L/M)



LINEARITY CHECK

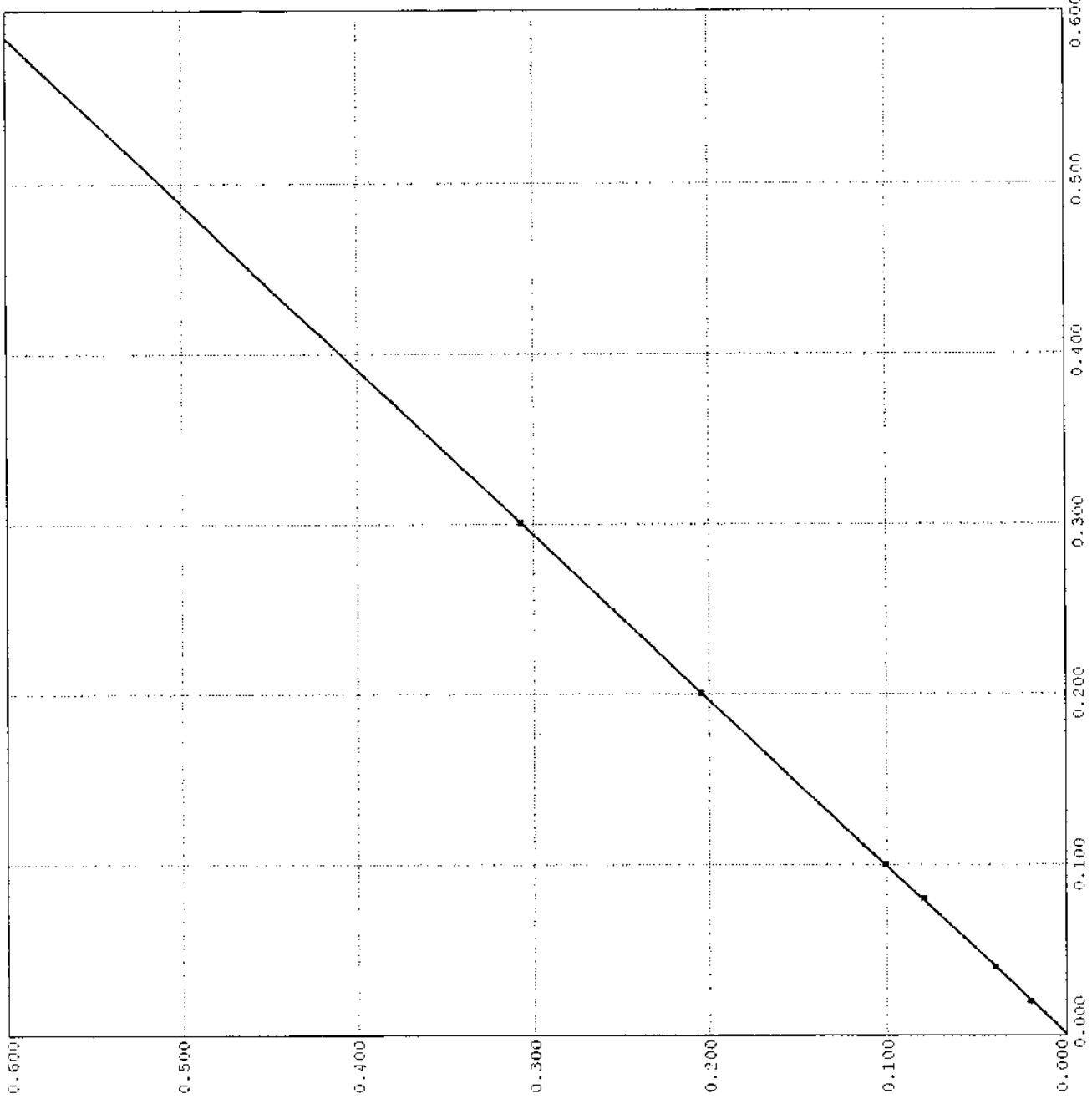
Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 12:59:22

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.040	0.0406	0.0005
0.080	0.0804	0.0005
0.100	0.1018	0.0004
0.200	0.2052	0.0004
0.300	0.3080	0.0000

SLOPE = 1.027993
R² = 0.999953



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

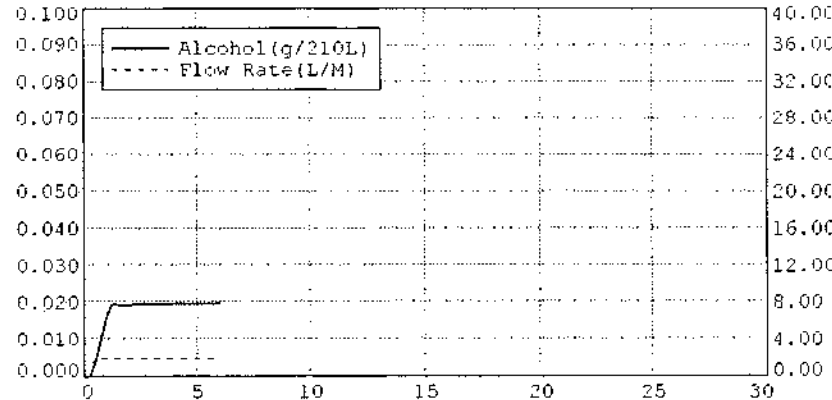
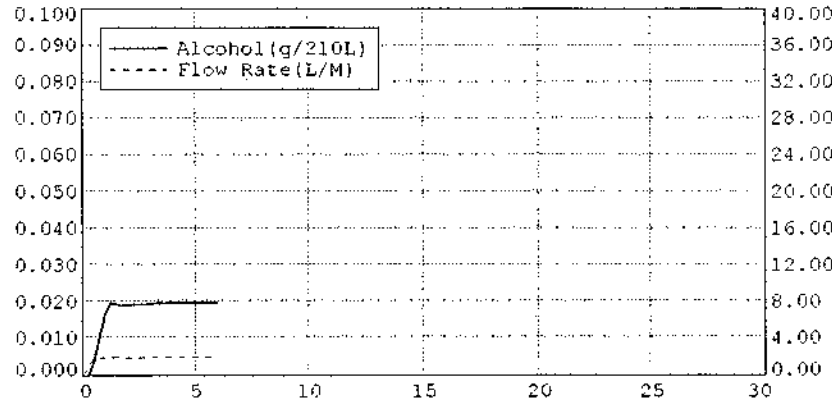
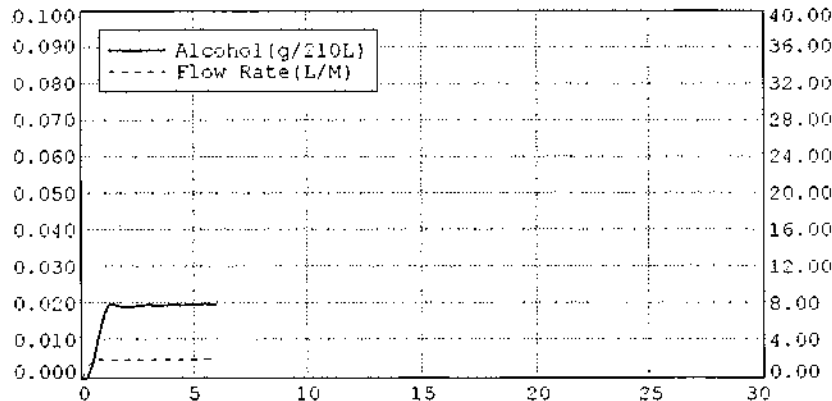
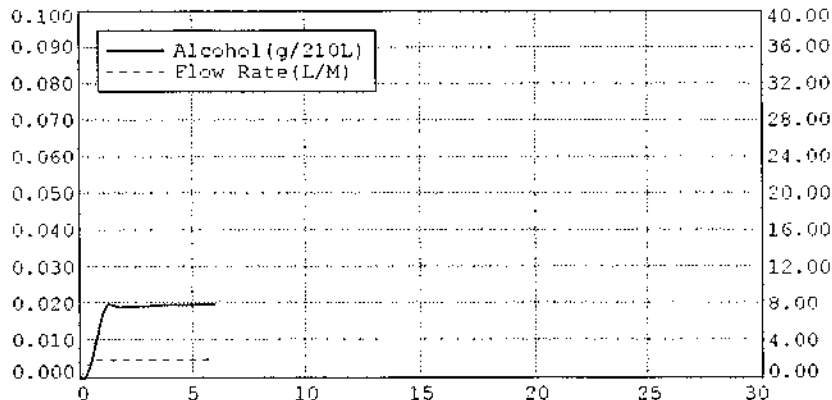
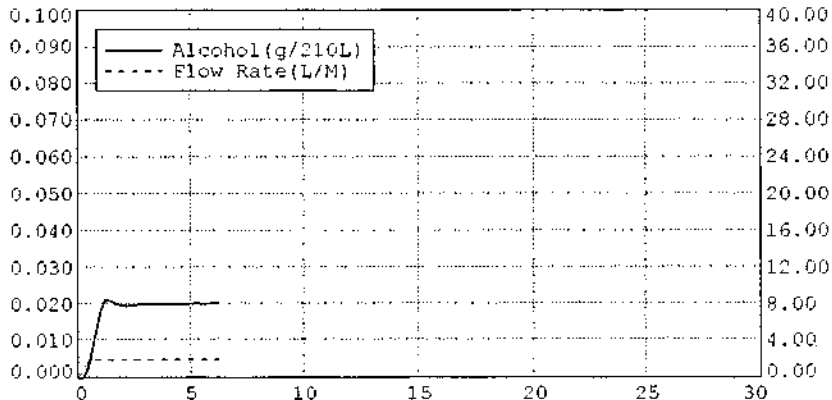
Date: 03/20/2018
 Time: 12:59:24

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.95: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 219 psi

BLANK TEST	0.000	13:00
INTERNAL STANDARD	VERIFIED	13:00
EXTERNAL STANDARD	0.021	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.021	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.021	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.021	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.021	13:05
BLANK TEST	0.000	13:06

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

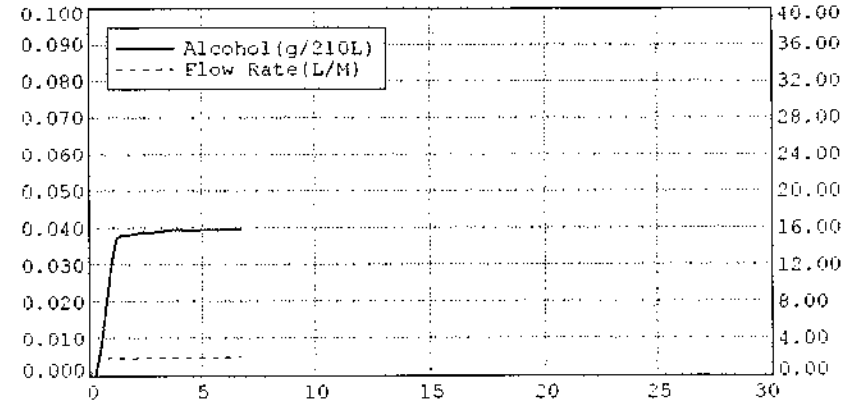
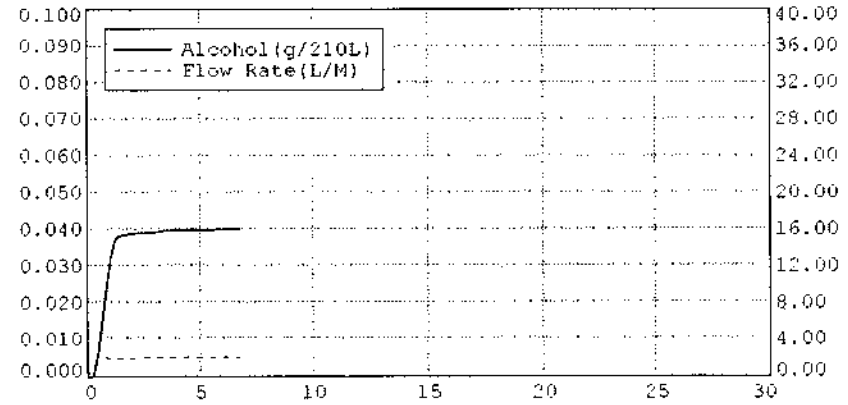
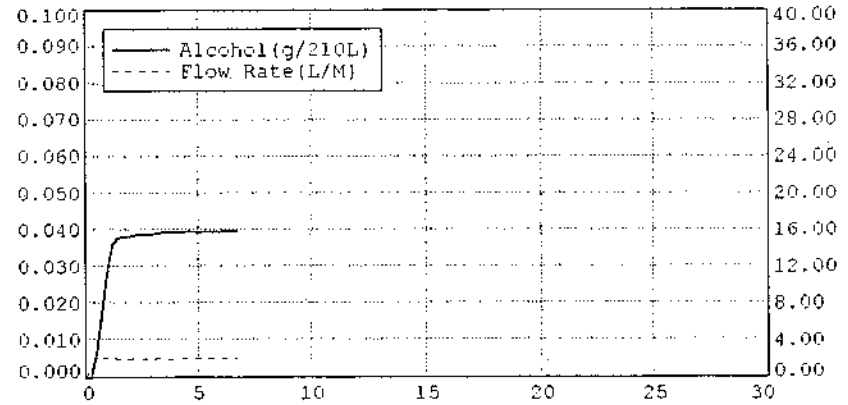
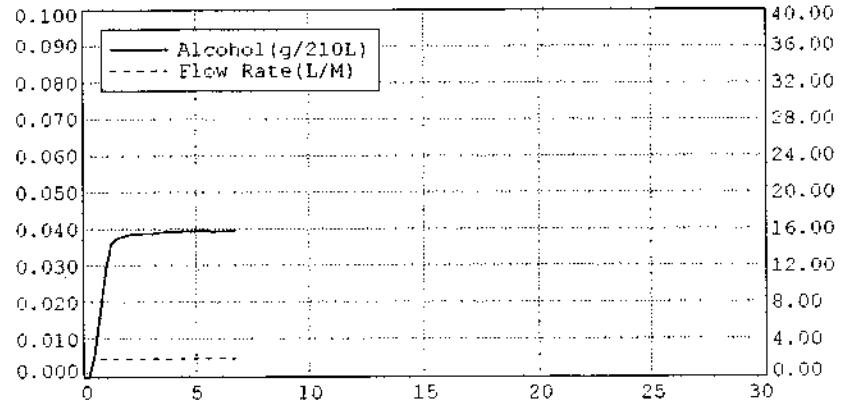
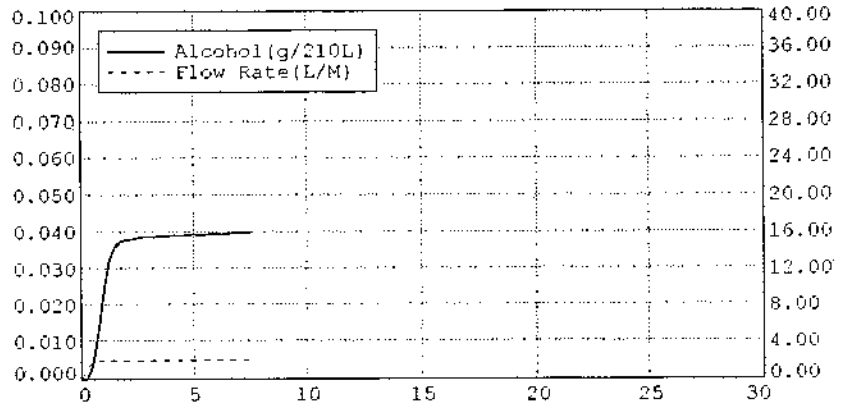
Date: 03/20/2018
 Time: 13:06:47

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.95: 0.040
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 301 psi

BLANK TEST	0.000	13:07
INTERNAL STANDARD	VERIFIED	13:08
EXTERNAL STANDARD	0.041	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.040	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.040	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.041	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.041	13:12
BLANK TEST	0.000	13:13

Average = 0.0406
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

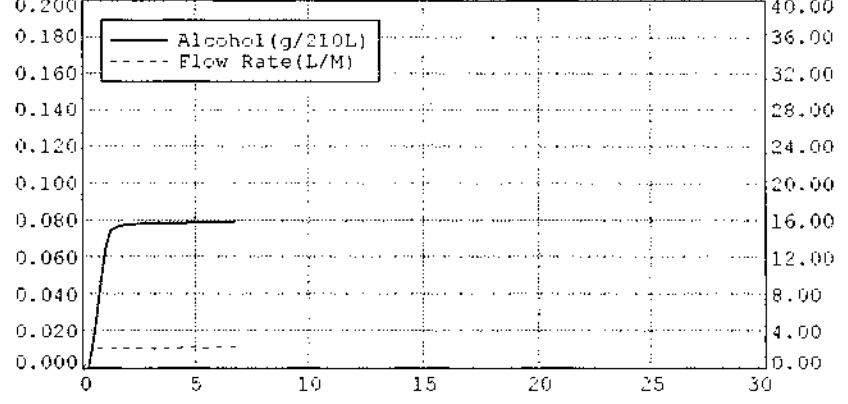
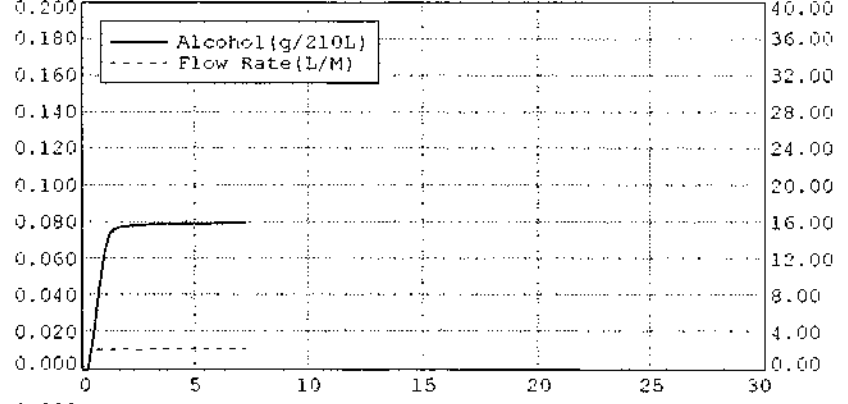
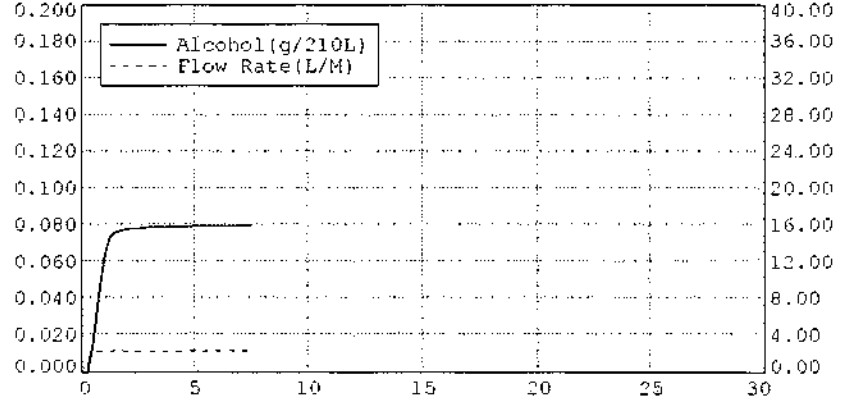
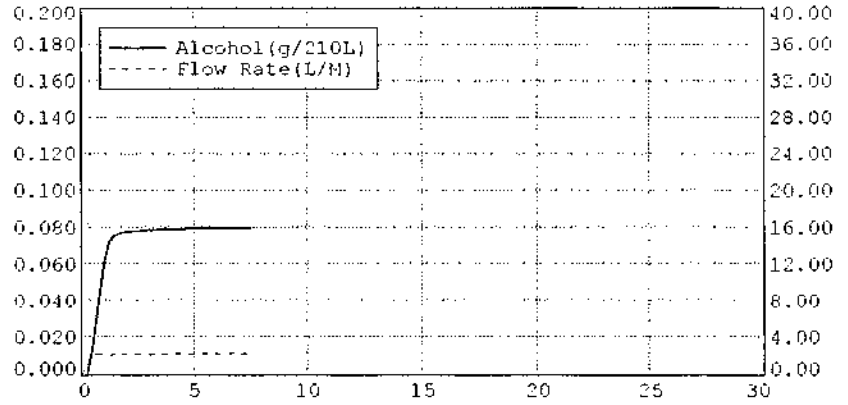
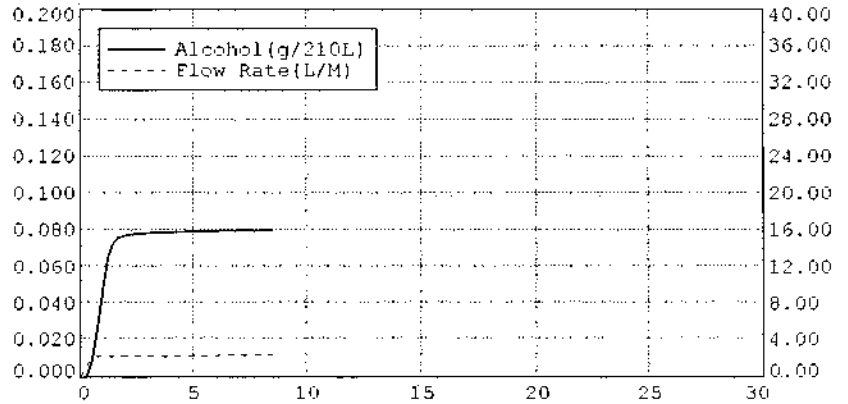
Date: 03/20/2018
 Time: 13:14:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.95: 0.080
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 895 psi

BLANK TEST	0.000	13:15
INTERNAL STANDARD	VERIFIED	13:15
EXTERNAL STANDARD	0.081	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.081	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.080	13:18
BLANK TEST	0.000	13:19
EXTERNAL STANDARD	0.080	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.080	13:20
BLANK TEST	0.000	13:21

Average = 0.0804
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

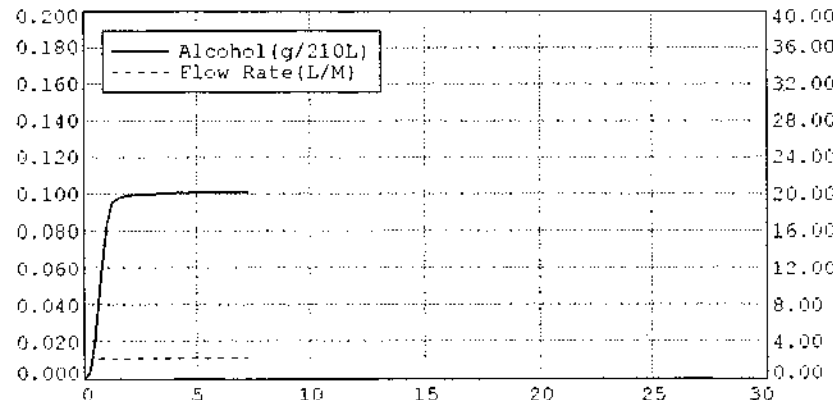
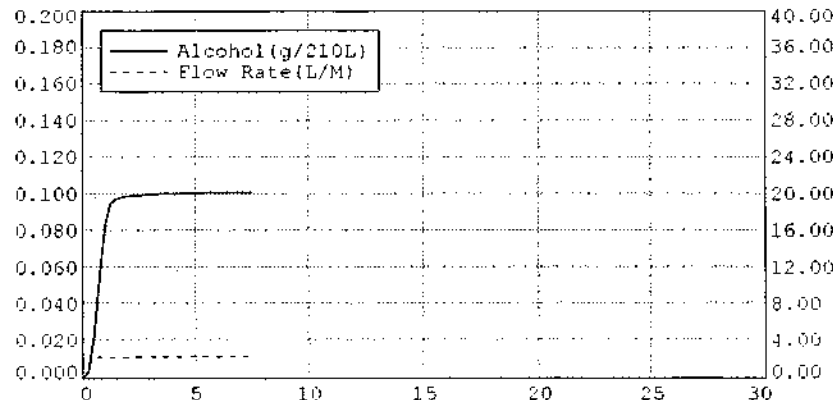
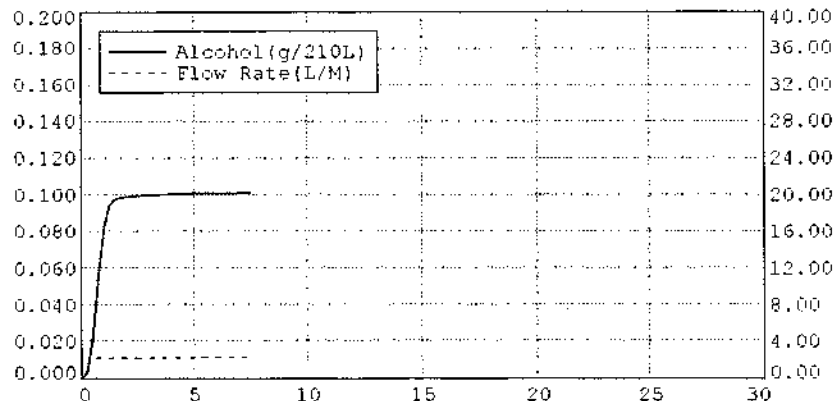
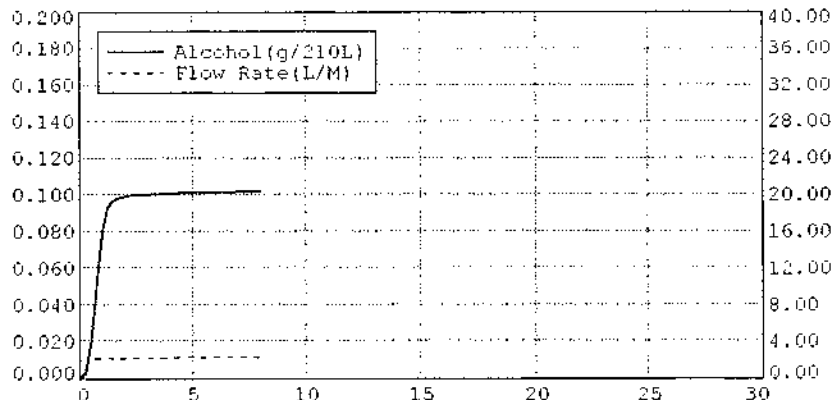
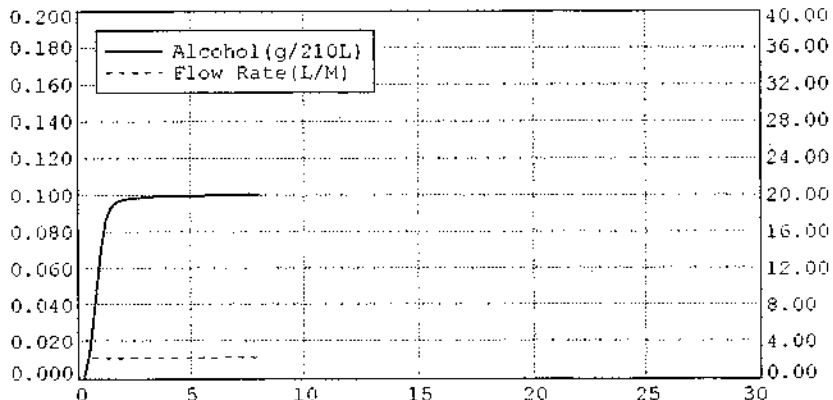
Date: 03/20/2018
 Time: 13:24:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.95: 0.100
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 1065 psi

BLANK TEST	0.000	13:26
INTERNAL STANDARD	VERIFIED	13:26
EXTERNAL STANDARD	0.101	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.102	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.102	13:29
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.102	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.102	13:31
BLANK TEST	0.000	13:32

Average = 0.1018
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

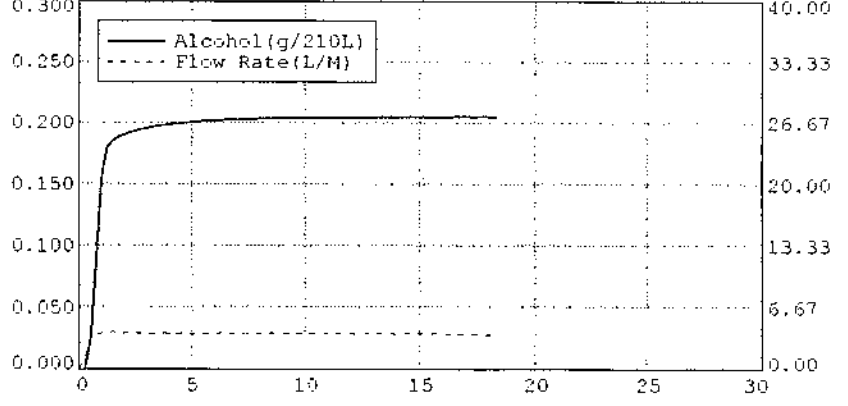
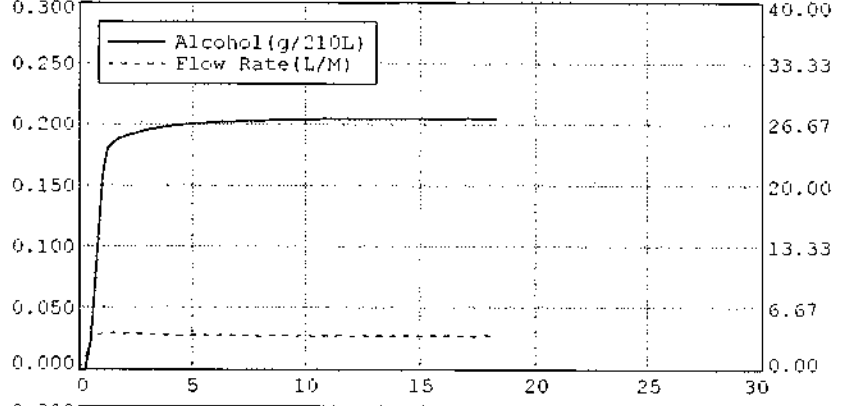
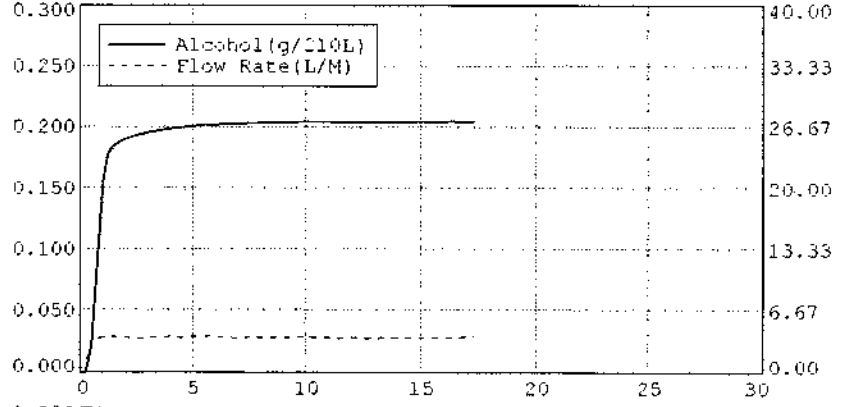
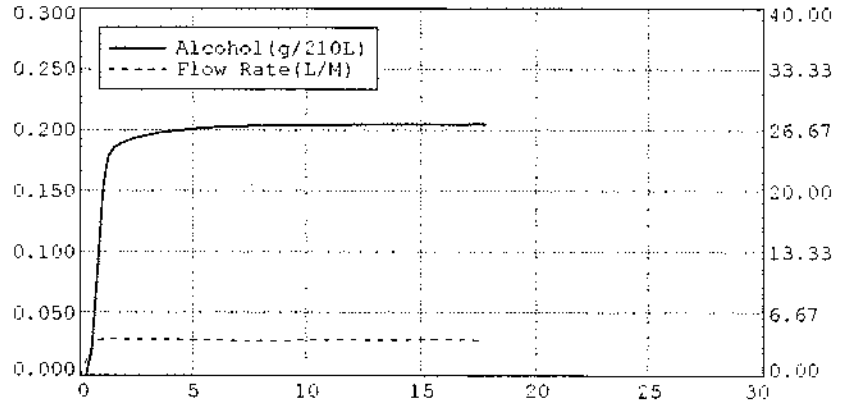
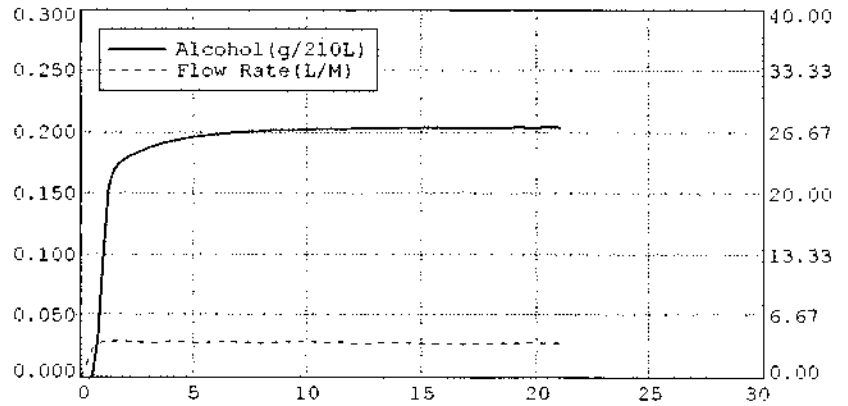
Date: 03/20/2018
 Time: 13:34:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 17090
 EXPIRATION: 02/24/2019

BLANK TEST	0.000	13:36
INTERNAL STANDARD	VERIFIED	13:37
EXTERNAL STANDARD	0.205	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.205	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.205	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.205	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.206	13:42
BLANK TEST	0.000	13:43

Average = 0.2052
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

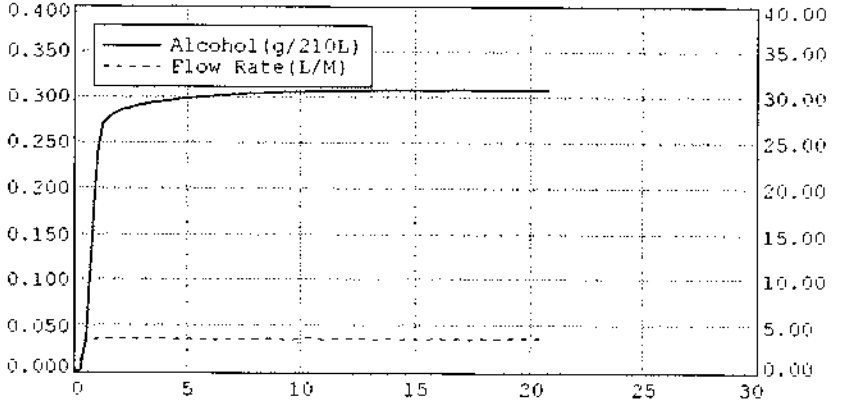
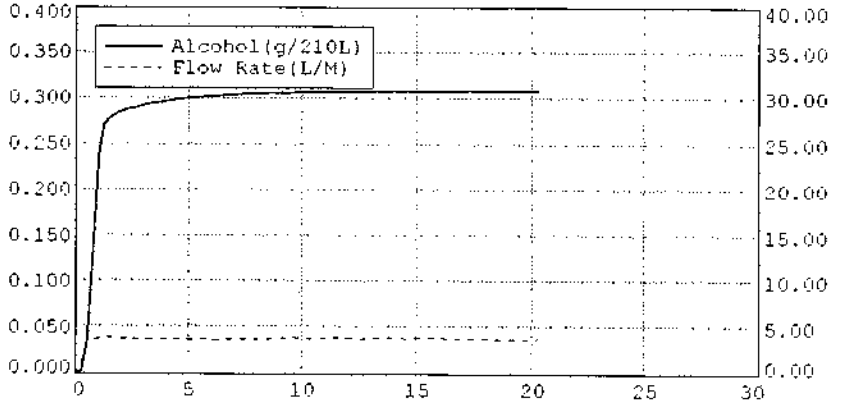
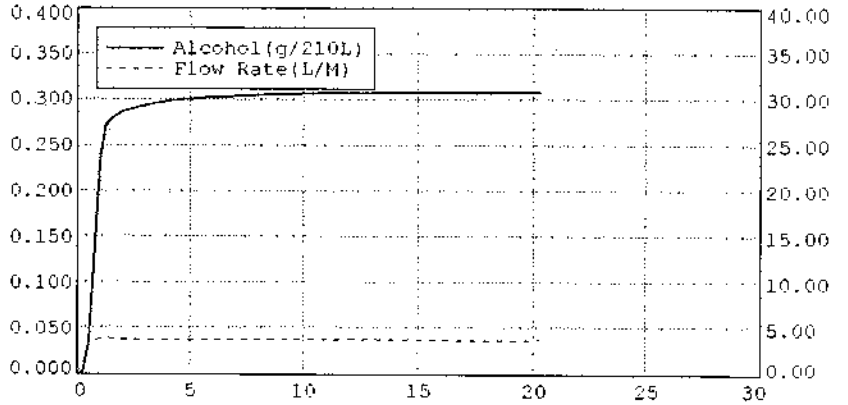
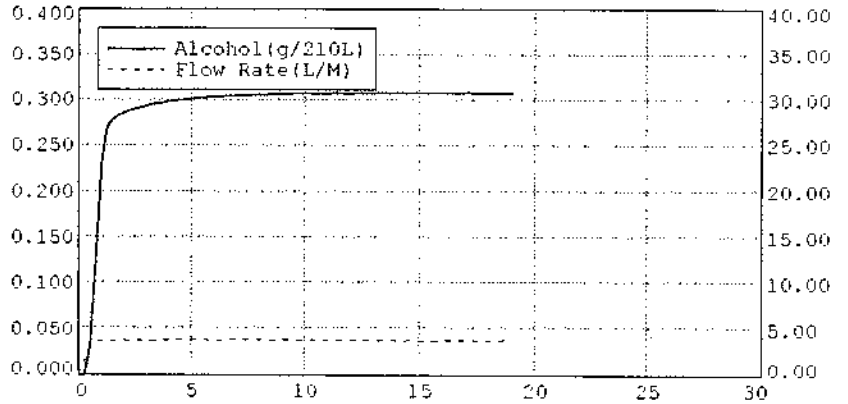
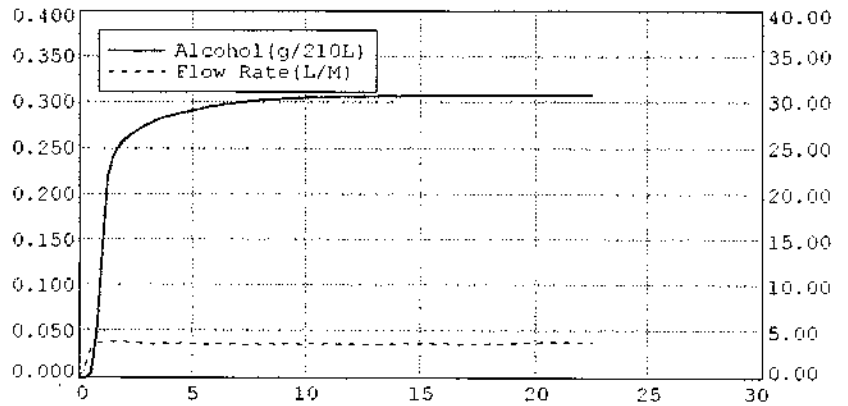
Date: 03/20/2018
 Time: 13:45:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 17140
 EXPIRATION: 05/15/2019

BLANK TEST	0.000	13:47
INTERNAL STANDARD	VERIFIED	13:47
EXTERNAL STANDARD	0.308	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.308	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.308	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.308	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.308	13:53
BLANK TEST	0.000	13:54

Average = 0.3080
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 14:36:27

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

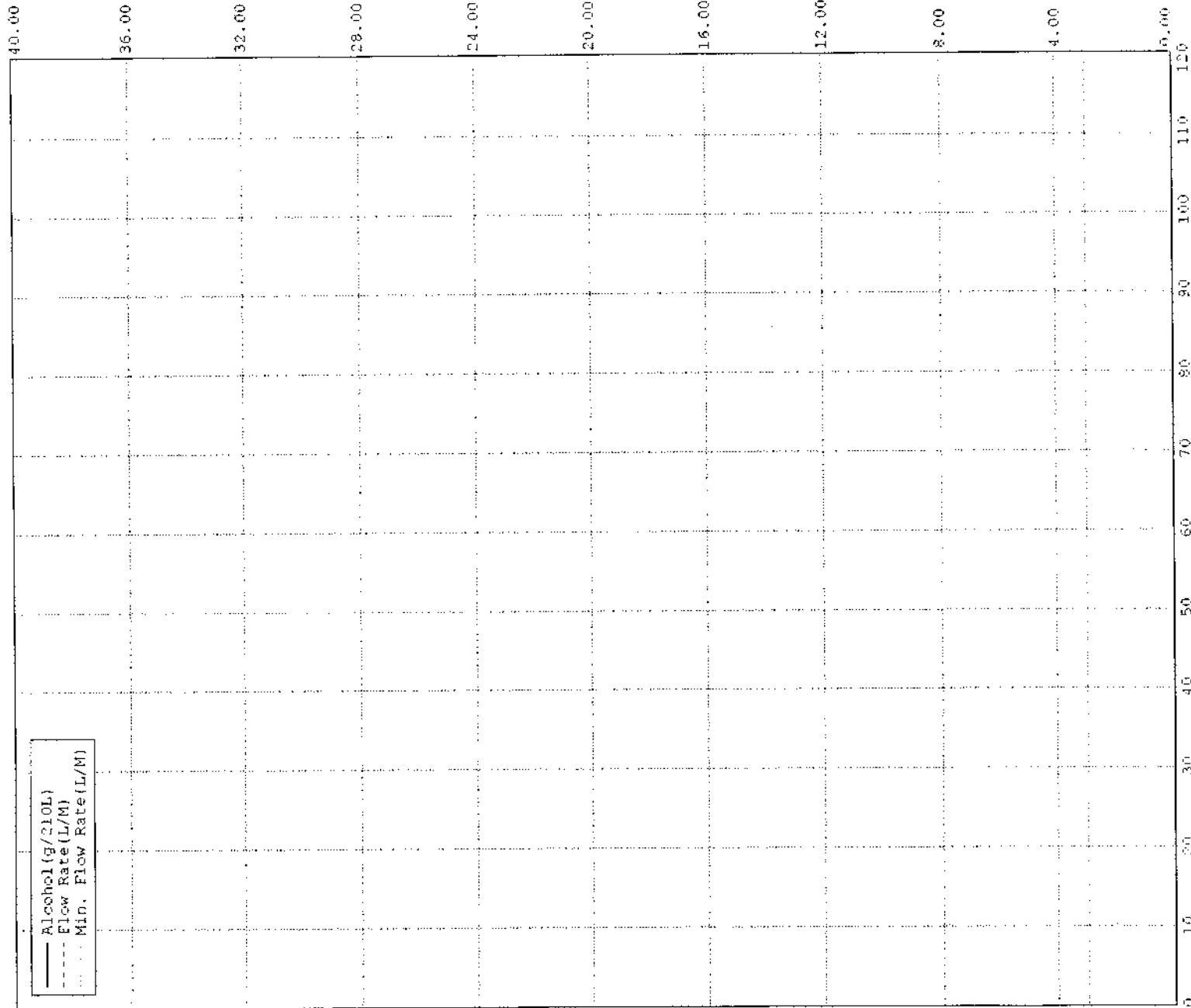
DEPT/AGENCY:
AAA1

CASE/REPORT: 18-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.98: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:37
BLANK TEST	0.000	14:37
INTERNAL STANDARD	VERIFIED	14:37
INTERNAL STANDARD	0.080	14:38
BLANK TEST	0.000	14:38
SUBJECT SAMPLE	INCOMPLETE	14:41



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 14:29:23

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

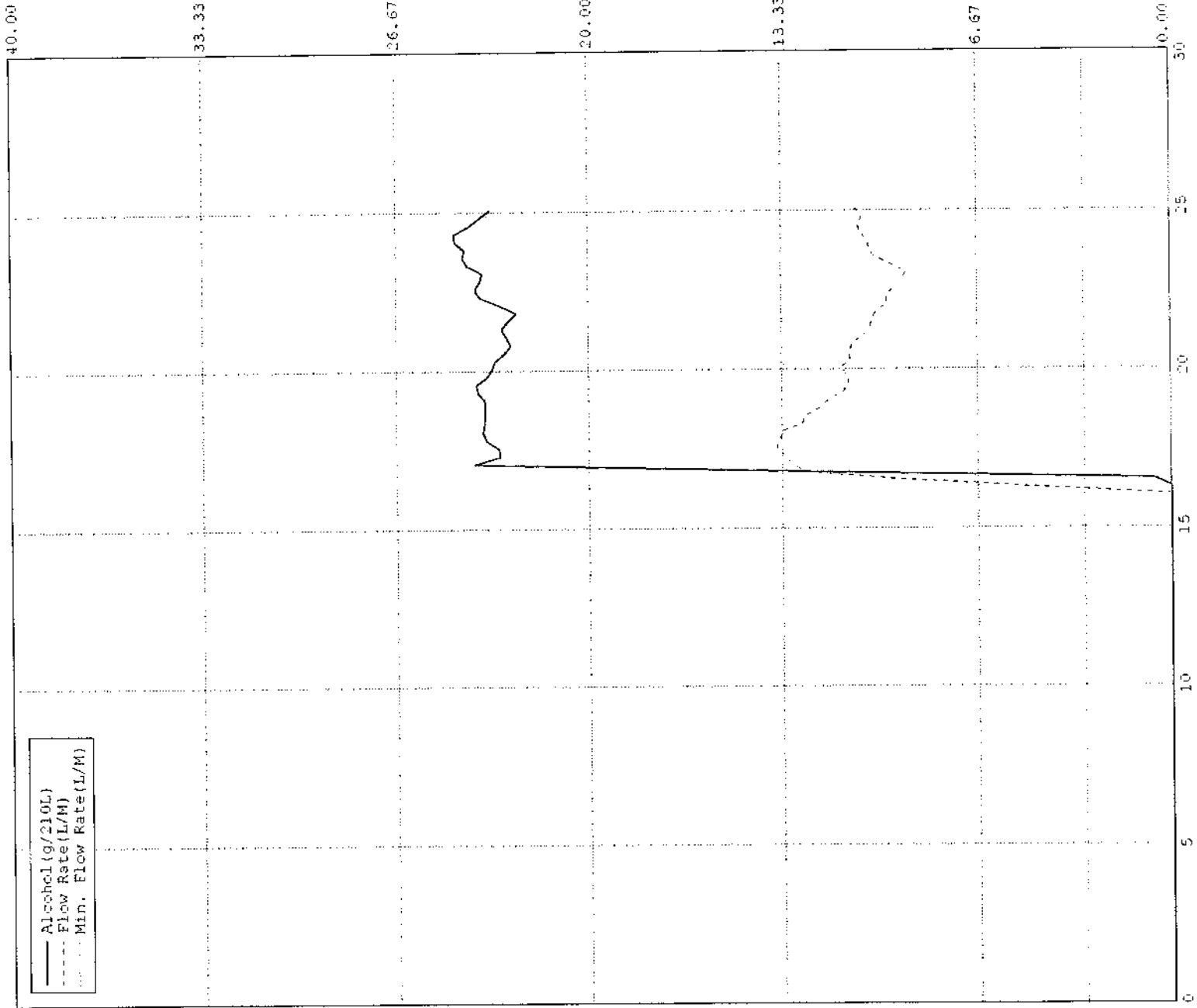
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 18-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.98: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:30
BLANK TEST	0.000	14:30
INTERNAL STANDARD	VERIFIED	14:30
EXTERNAL STANDARD	0.081	14:30
BLANK TEST	0.000	14:31
SUBJECT SAMPLE	INVALID	14:32



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 15:11:03

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 18-1234
TEST TYPE: TEST

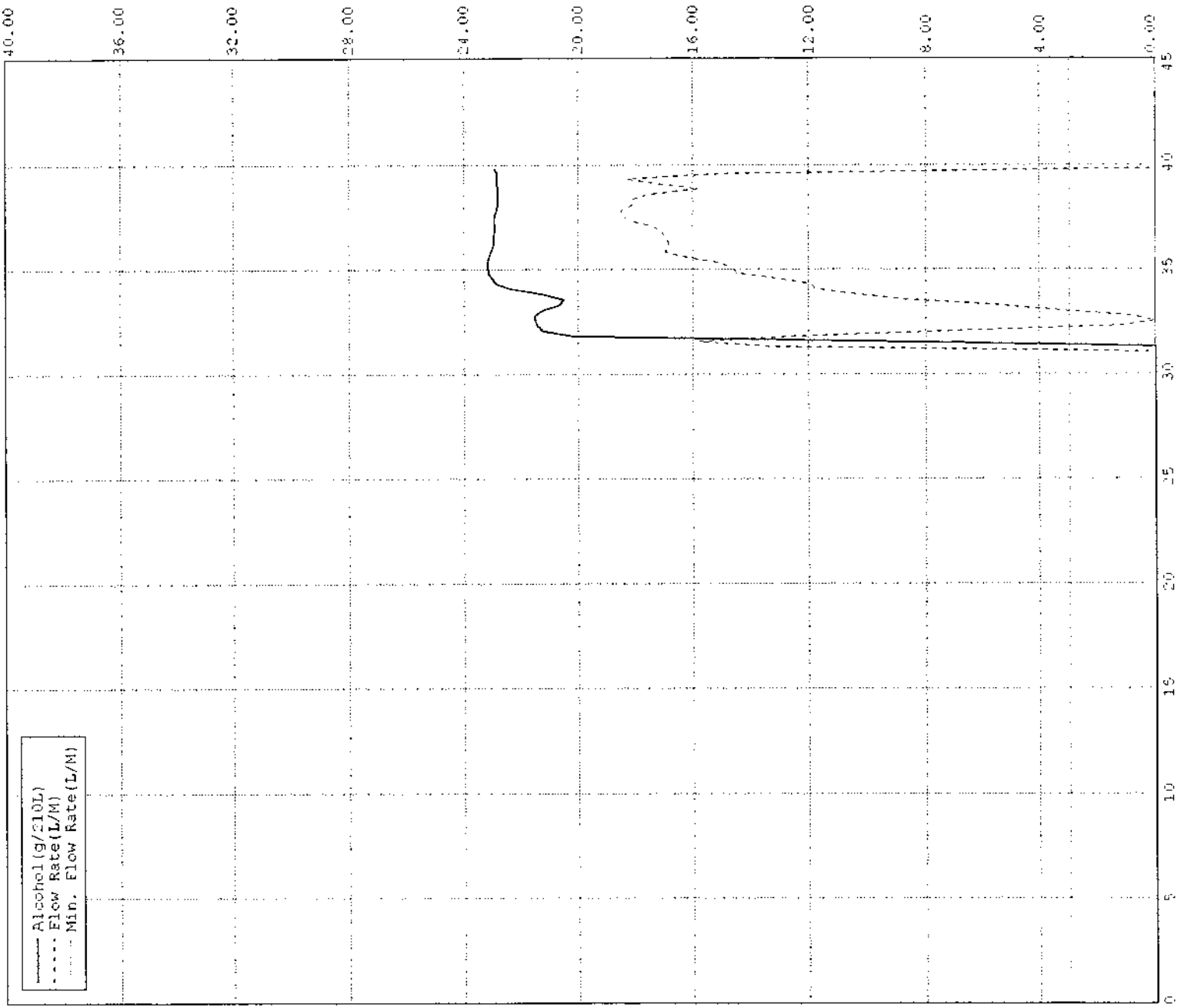
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.00: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 15:12
BLANK TEST 0.000 15:12
INTERNAL STANDARD VERIFIED 15:12
Xq = 0.113 (0.16%)
EXTERNAL STANDARD 0.080 15:12
X[1] = 0.0805 (-0.0002) (0.0030)
BLANK TEST 0.000 15:13
SUBJECT SAMPLE XXX 15:14
X[1] = 0.1145 (-0.0157) (0.0022)

Interference Detected

Filter 2 avg = -0.0005

Filter 3 avg = 0.0001



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 15:17:15

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

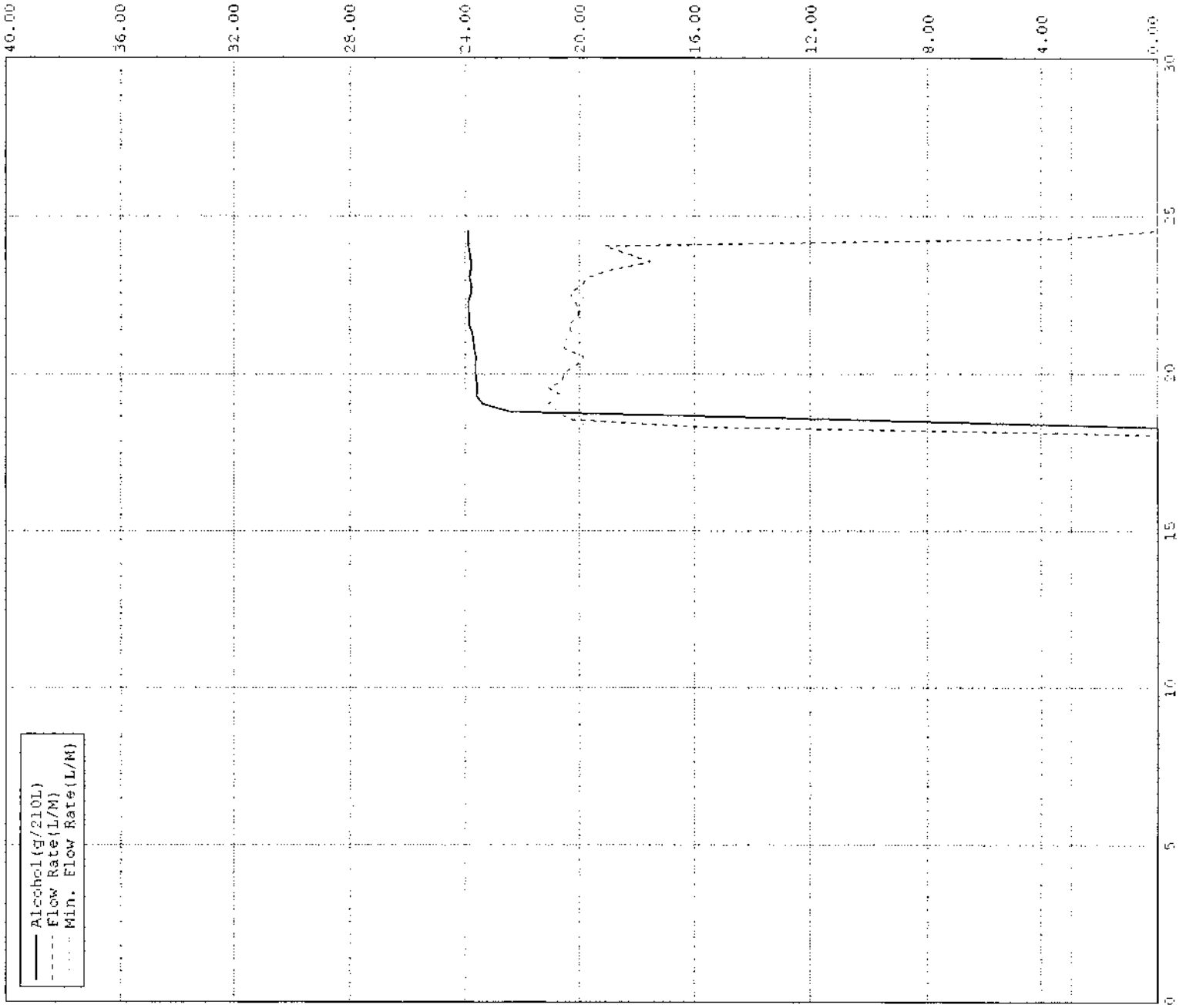
OPERATOR NAME:
COLLEEN S. OBRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:
AAAA
CASE/REPORT: 18-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.99: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 15:18
BLANK TEST 0.000 15:18
INTERNAL STANDARD VERIFIED 15:18
Xq = 0.113 (0.47%)
EXTERNAL STANDARD 0.081 15:18
X[1] = 0.0806 (-0.0007) (0.0023)
BLANK TEST 0.000 15:19
SUBJECT SAMPLE XXX 15:20
X[1] = 0.1196 (-0.0259) (0.0001)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 14:59:21

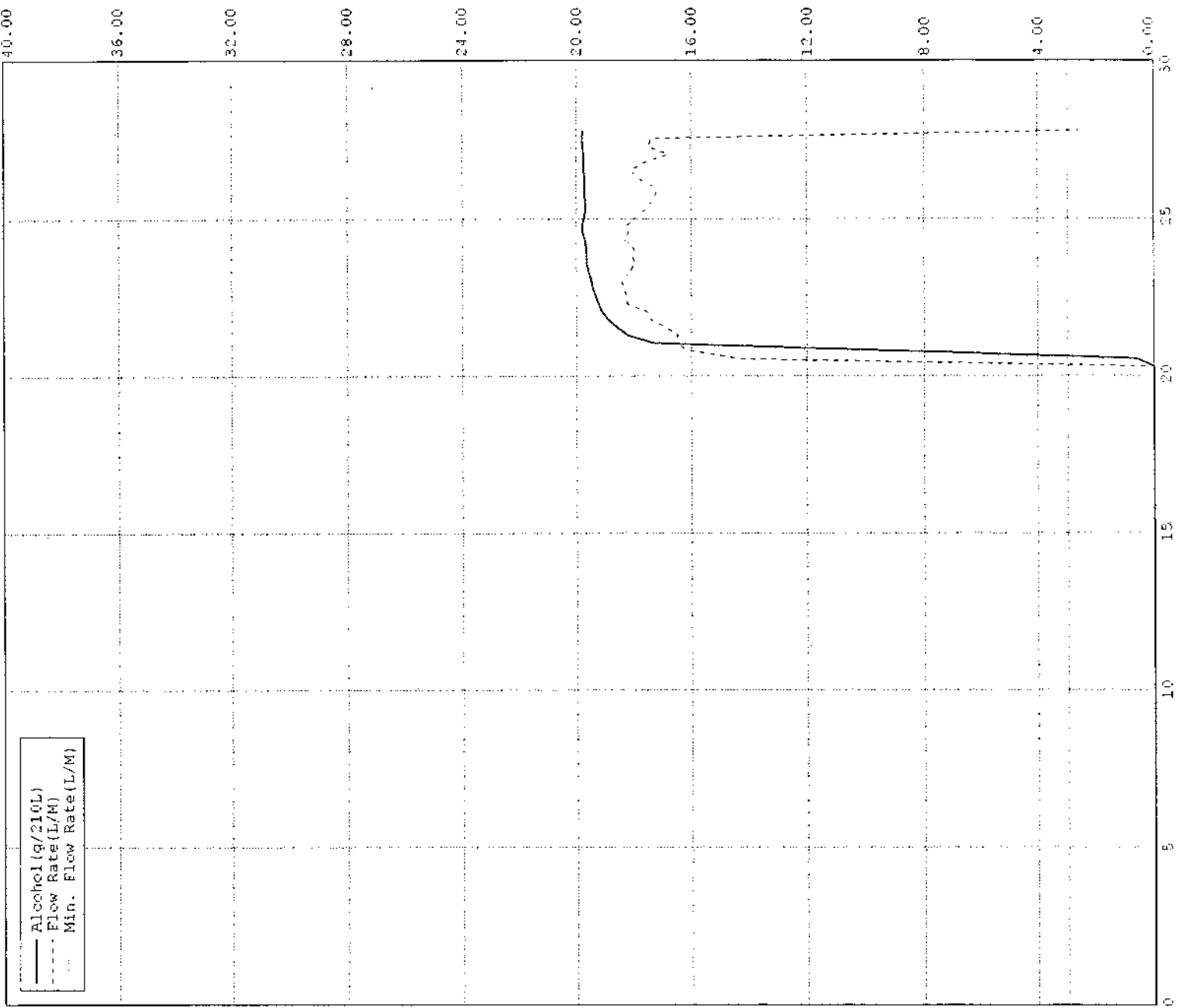
SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 18-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.99: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	15:00
BLANK TEST	0.000	15:00
INTERNAL STANDARD	VERIFIED	15:00
Xq = 0.112 (0.62%)		
EXTERNAL STANDARD	0.080	15:00
X[1] = 0.0800 (-0.0006)	(0.0023)	
BLANK TEST	0.000	15:01
SUBJECT SAMPLE (Vol=2.12L)	0.099	15:02
X[1] = 0.0993 (-0.0008)	(0.0007)	
BLANK TEST	0.000	15:03
EXTERNAL STANDARD	0.080	15:03
X[1] = 0.0803 (-0.0003)	(0.0007)	
BLANK TEST	0.000	15:04



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 14:44:32

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

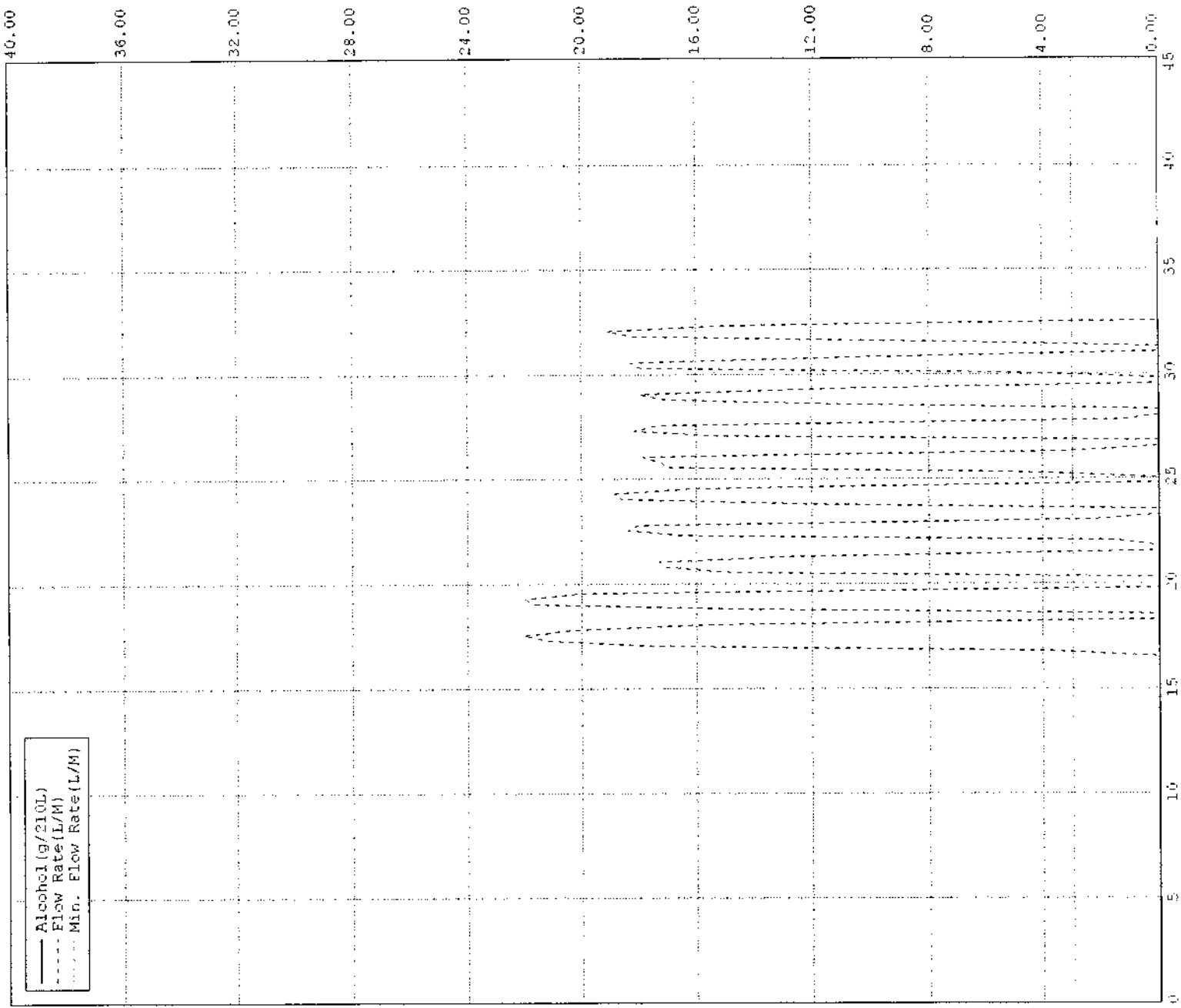
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 18-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.99: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:48
BLANK TEST 0.000 14:48
INTERNAL STANDARD VERIFIED 14:48
EXTERNAL STANDARD 0.081 14:49
BLANK TEST 0.000 14:50
SUBJECT SAMPLE XXX 14:50

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/20/2018
Time: 14:24:57

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 18-1234
TEST TYPE: TEST

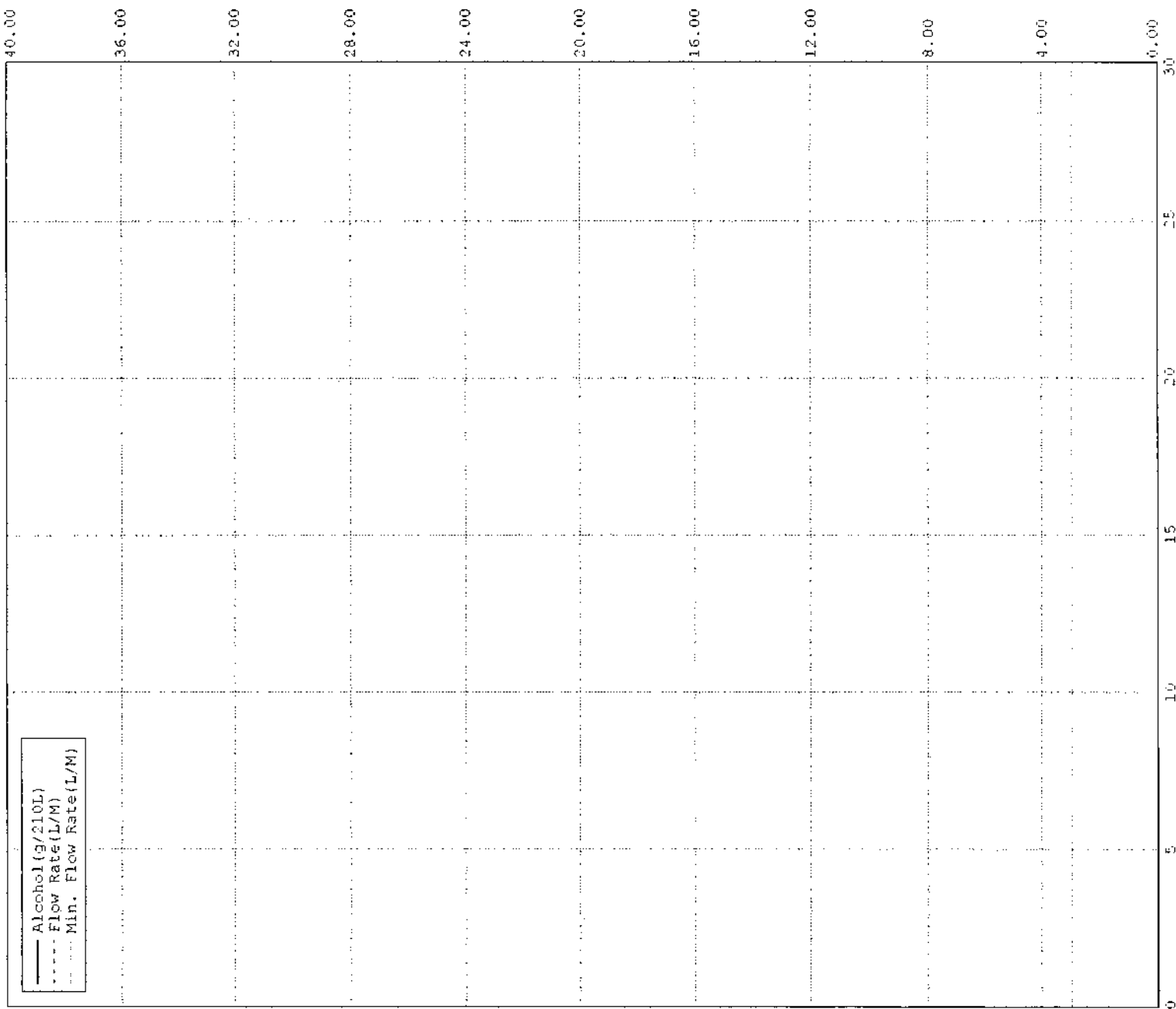
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.98: 0.080

DIAGNOSTIC CHECK	PASSED	14:25
BLANK TEST	0.000	14:26
INTERNAL STANDARD	VERIFIED	14:26
EXTERNAL STANDARD	0.080	14:26
BLANK TEST	0.000	14:27

RFI DETECTED

CB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 03/21/2018
Time: 06:15:32

SUBJECT NAME:
TEST TEST
LICENSE #: NON-DRINKING

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 18-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.13: 0.081
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	06:16
BLANK TEST	0.000	06:16
INTERNAL STANDARD	VERIFIED	06:16
EXTERNAL STANDARD	0.081	06:17
BLANK TEST	0.000	06:18
SUBJECT SAMPLE (Vol=1.61L)	0.000	06:18
BLANK TEST	0.000	06:19
EXTERNAL STANDARD	0.082	06:19
BLANK TEST	0.000	06:20

CRB

