

# 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 100696 Analyst Colleen O'Bryant Start Date 7/13/16

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 1.4 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 Argon Lot AG608504 Exp 3/25/18

iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17

v. 0.200g/210L Mnf Both Lot 15130 Exp 5/11/17

1. Simulator S/N DR5298 Date Calibrated 8/5/15

vi. 0.300g/210L Mnf Both Lot 15170 Exp 7/20/17

1. Simulator S/N SD1188 Date Calibrated 8/5/15

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Both Lot 15220 Level 0.100 Exp 9/28/17

1. Simulator S/N SD1199 Date Calibrated 8/5/15

ii. Isopropanol - Mnf Both Lot 15220 Level 0.100 Exp 9/28/17

1. Simulator S/N SD1177 Date Calibrated 8/5/15

iii. Negative Control - Mnf Both Lot 15220 Level 0.100 Exp 9/28/17

1. Simulator S/N DR4161 Date Calibrated 8/5/15

e. RFI

6. Verify stylus is calibrated

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload

13. Remove tank prior to shut down

End Date 7/14/16

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100696  
-----

Date: 07/13/2016  
Time: 13:17:30

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 46.4°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.74 V PASSED  
(1.04 V - 2.44 V)  
Cooler Voltage = 1.75 V PASSED  
(1.06 V - 2.48 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 528 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.576 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 = 0.105 1.02% (0.00% - 4.00%) PASSED

Technician Screen

-----  
DATAMASTER dmt: 100696  
-----

Date: 07/13/2016

Time: 2:06 PM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 46.5°C

Current Barometer 30.0 in

Volume (Ltr) 1.60

Settings

Lamp: 1.74 V

Bias: 80 V

Cooler: 1.77 V

Chopper: 530 Hz

Voltages (V)

Flow: 1.04 V

Detector: -0.016 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100696  
-----

Date: 02/11/2016  
Time: 09:57:19

OPERATOR NAME:  
NPAS TECH  
CERTIFICATE #: G12921, 15200, 34.0C

Ca = 0.1010  
CAL = 1.002703    0.800 <= CAL < 1.200  
b1 = 0.0006    0.0000 <= b1 < 0.0040  
b2 = 0.0062    0.0010 <= b2 < 0.0100  
b3 = 0.0001    0.0000 <= b3 < 0.0040  
Xq = 0.1037    0.0500 <= Xq < 0.2000  
a21 = 1.171655    1.050 <= a21 < 1.300  
a31 = 0.482404    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100696

Date: 07/13/2016  
Time: 14:08:16

SUBJECT NAME:  
TEST TEST  
LICENSE #: VOLUME TEST

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

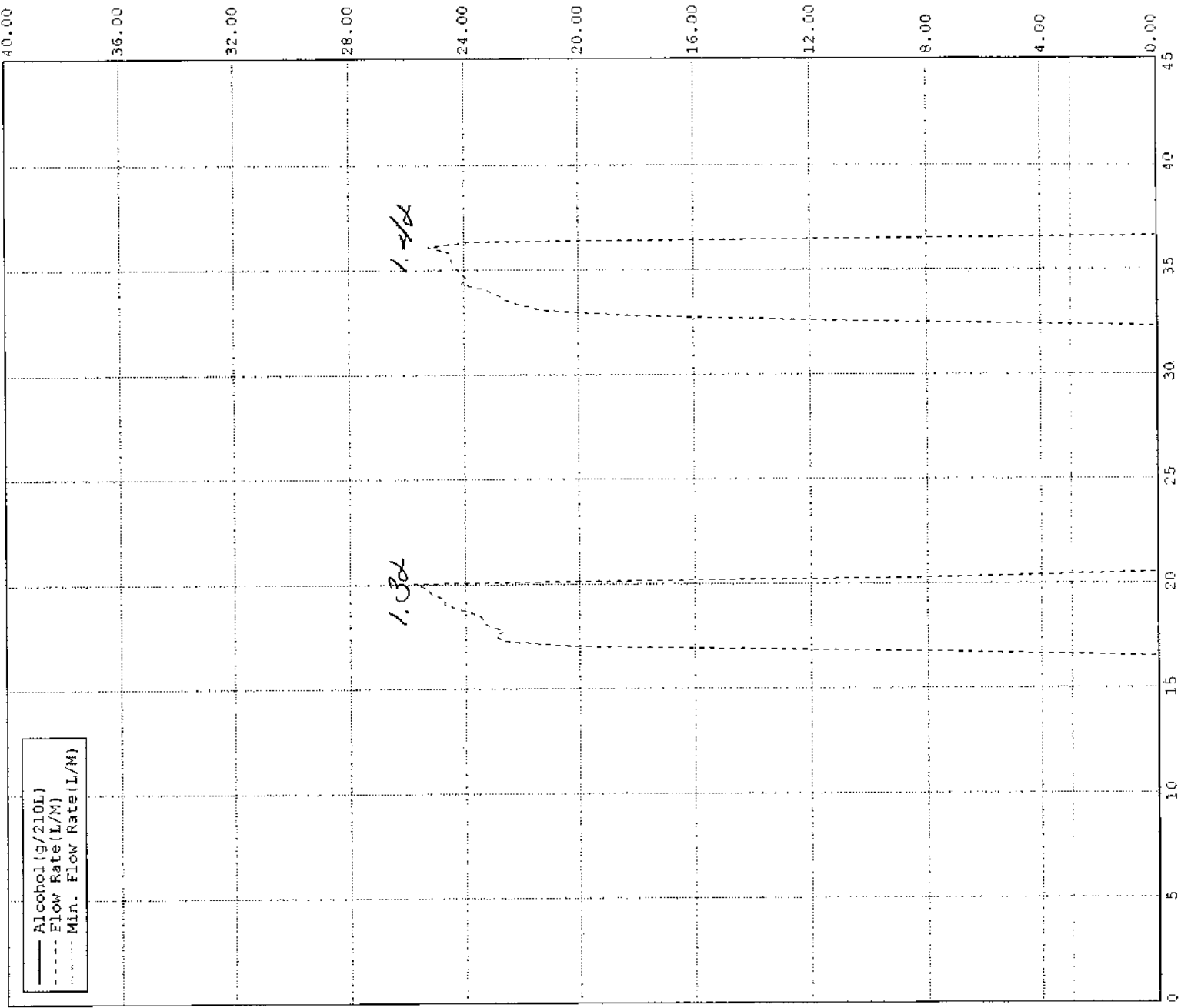
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.95: 0.080  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:09
BLANK TEST	0.000	14:09
INTERNAL STANDARD	VERIFIED	14:09
EXTERNAL STANDARD	0.080	14:09
BLANK TEST	0.000	14:10
SUBJECT SAMPLE (Vol=1.50L)	0.000	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.081	14:12
BLANK TEST	0.000	14:13

CSB



LINEARITY CHECK

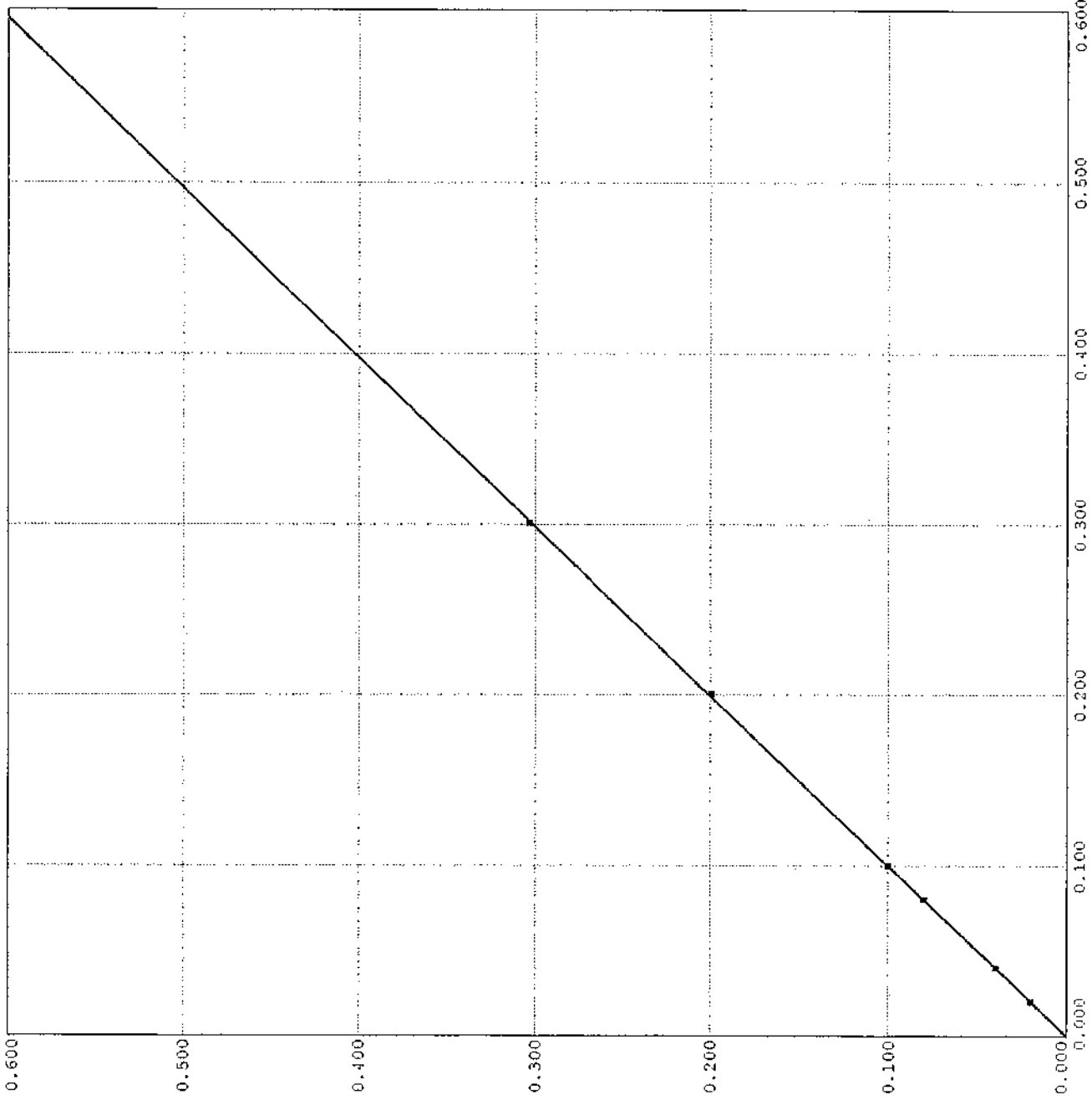
Alaska Department of Public Safety  
 DATAMASTER dmt: 100696

Date: 07/13/2016  
 Time: 14:24:53

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.040	0.0406	0.0005
0.080	0.0810	0.0000
0.100	0.1010	0.0000
0.200	0.2002	0.0008
0.300	0.3040	0.0010

SLOPE = 1.008786  
 R<sup>2</sup> = 0.999917



CB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100696

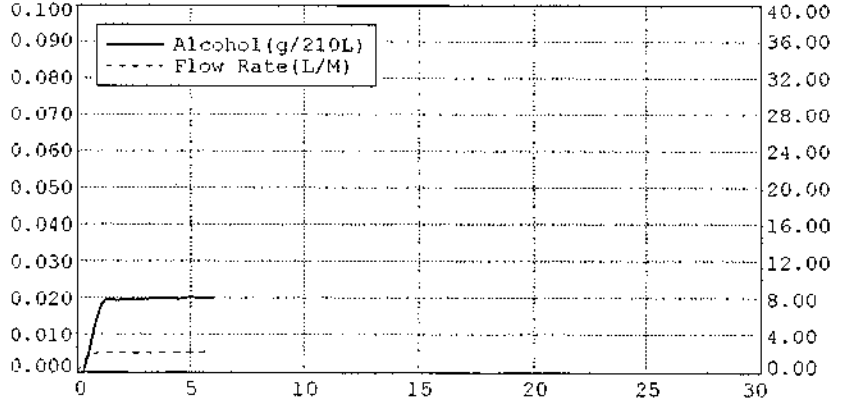
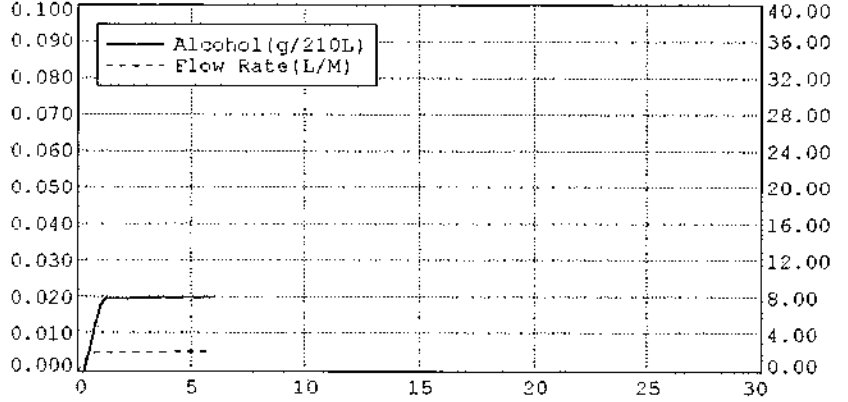
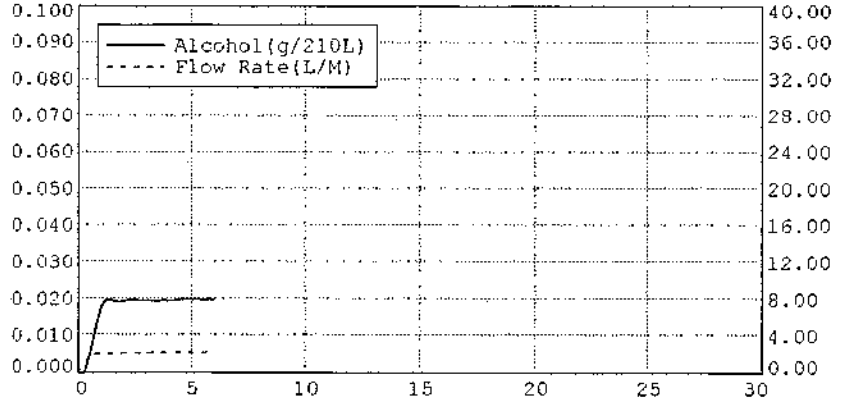
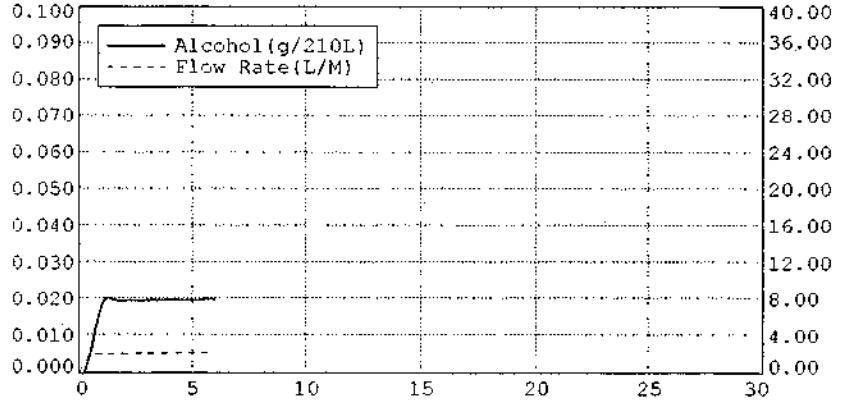
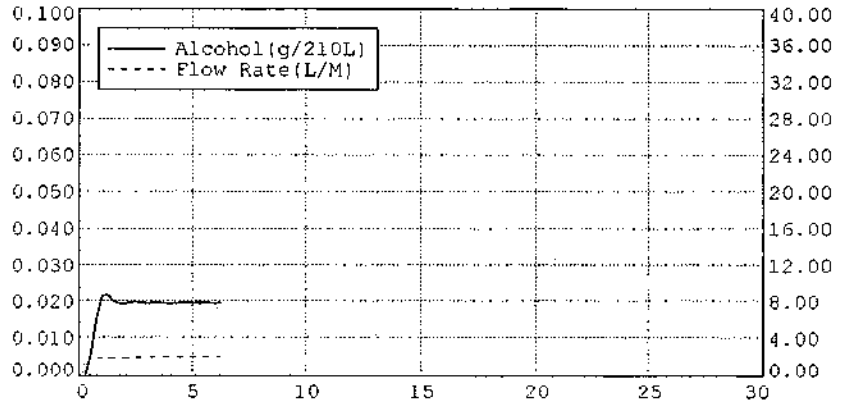
Date: 07/13/2016  
 Time: 14:24:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.96: 0.020  
 LOT #: 02915020A2  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 828 psi

BLANK TEST	0.000	14:26
INTERNAL STANDARD	VERIFIED	14:26
EXTERNAL STANDARD	0.021	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.021	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.021	14:28
BLANK TEST	0.000	14:29
EXTERNAL STANDARD	0.021	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.021	14:30
BLANK TEST	0.000	14:31

Average = 0.0210  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100696

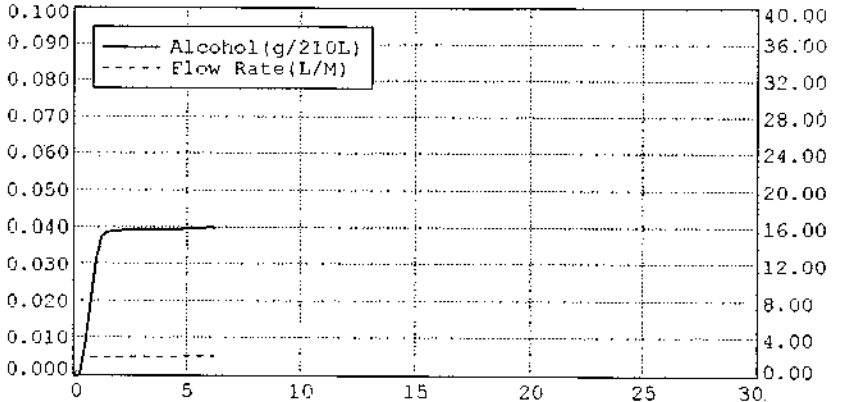
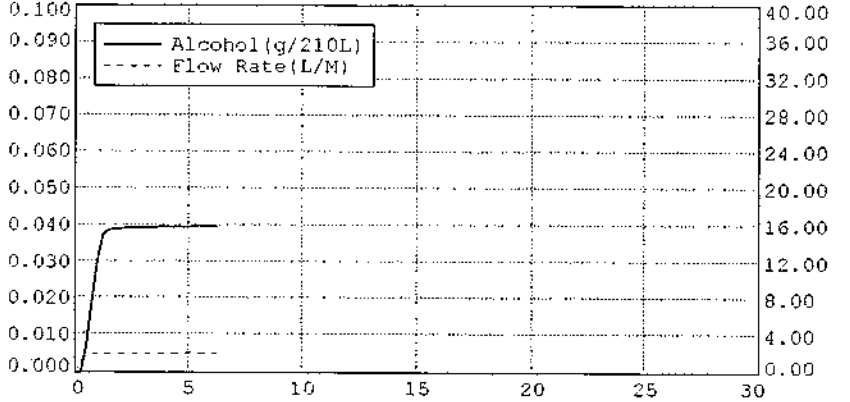
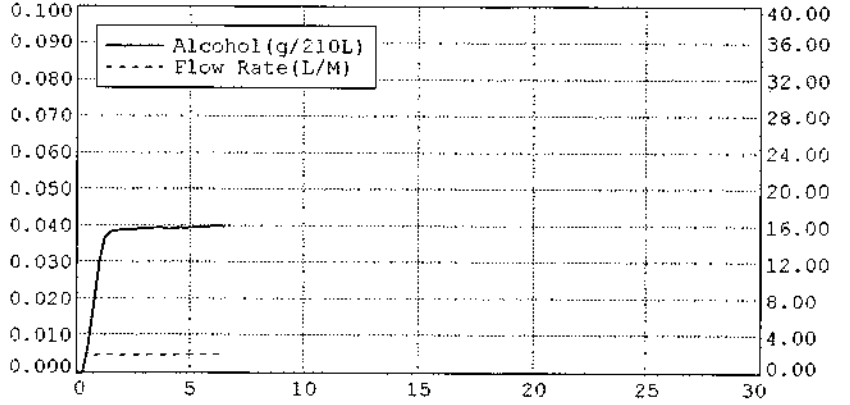
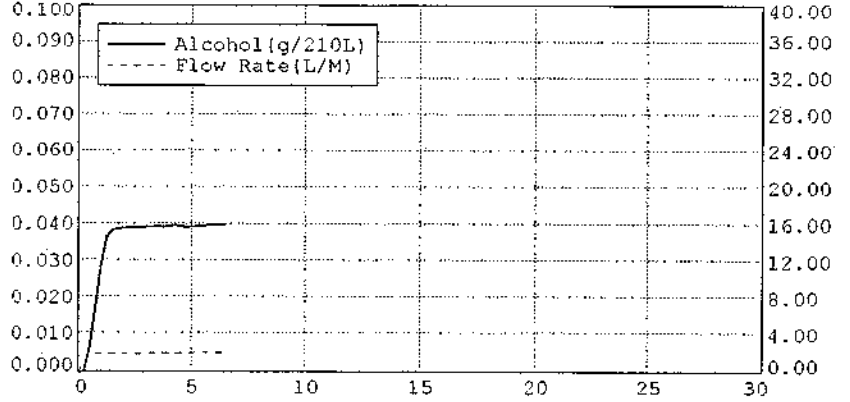
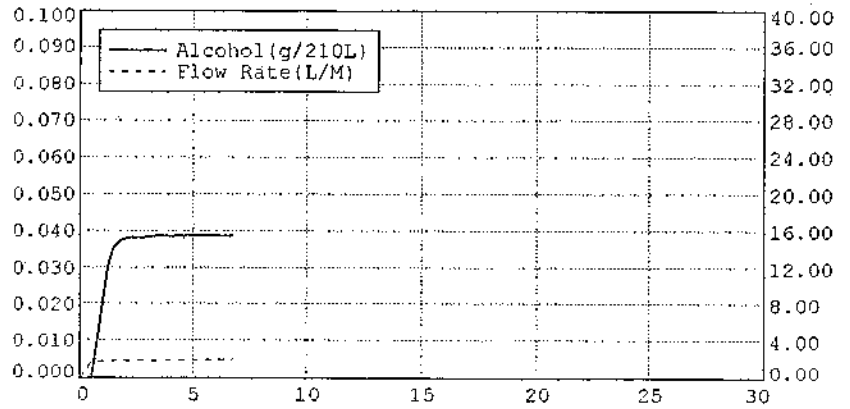
Date: 07/13/2016  
 Time: 14:46:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.95: 0.040  
 LOT #: 02915040A3  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 301 psi

BLANK TEST	0.000	14:47
INTERNAL STANDARD	VERIFIED	14:47
EXTERNAL STANDARD	0.040	14:47
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.041	14:48
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.040	14:49
BLANK TEST	0.000	14:50
EXTERNAL STANDARD	0.041	14:50
BLANK TEST	0.000	14:51
EXTERNAL STANDARD	0.041	14:51
BLANK TEST	0.000	14:52

Average = 0.0406  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100696

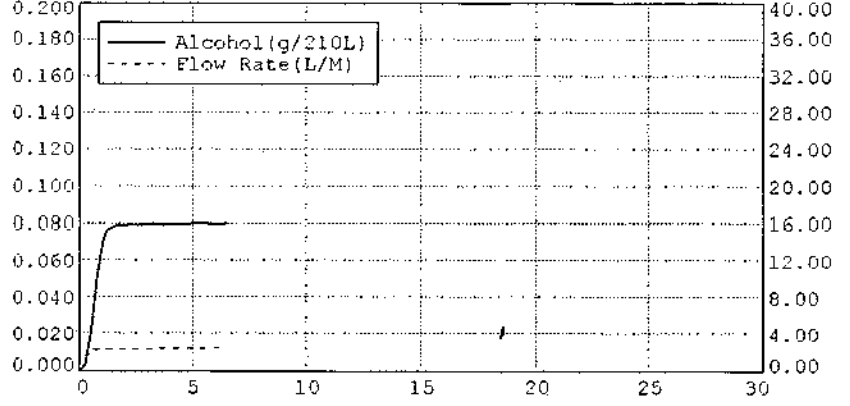
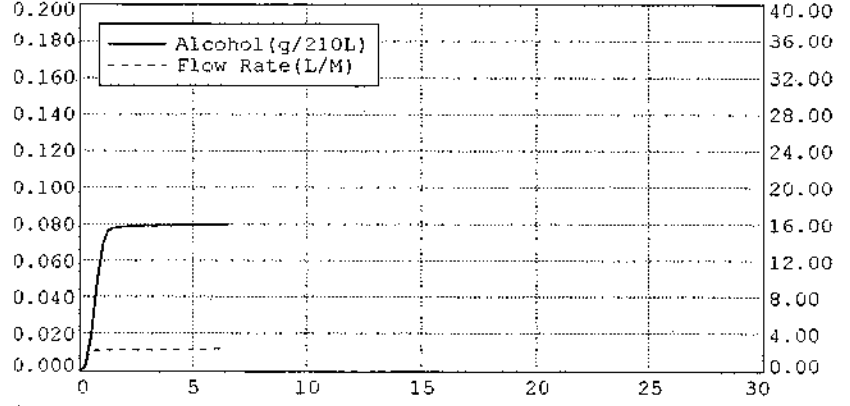
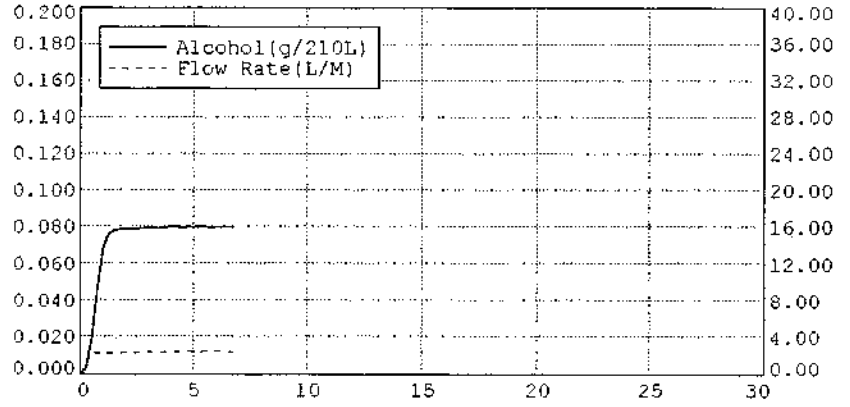
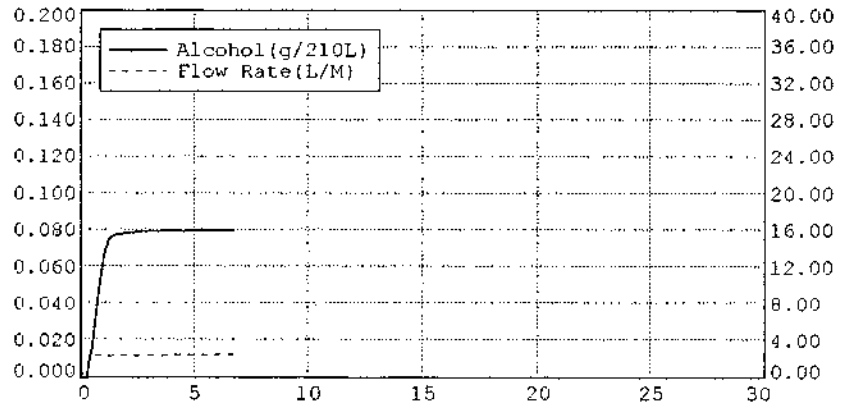
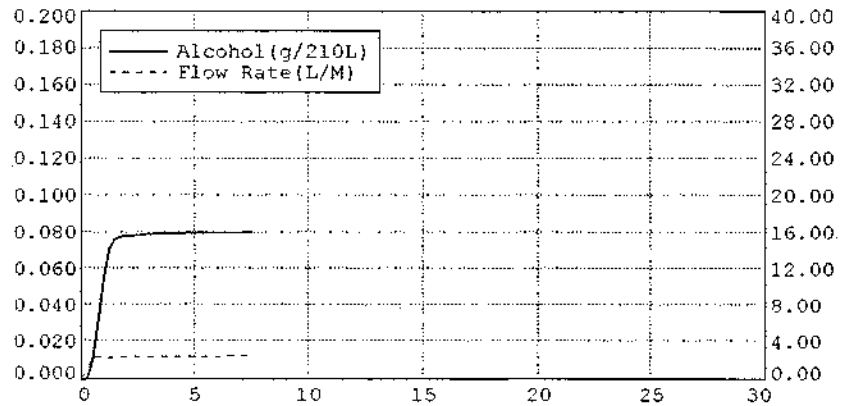
Date: 07/13/2016  
 Time: 14:53:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.96: 0.080  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018  
 TANK PRESSURE: 1133 psi

BLANK TEST	0.000	14:55
INTERNAL STANDARD	VERIFIED	14:55
EXTERNAL STANDARD	0.081	14:55
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.081	14:56
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.081	14:57
BLANK TEST	0.000	14:58
EXTERNAL STANDARD	0.081	14:58
BLANK TEST	0.000	14:59
EXTERNAL STANDARD	0.081	14:59
BLANK TEST	0.000	15:00

Average = 0.0810  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100696

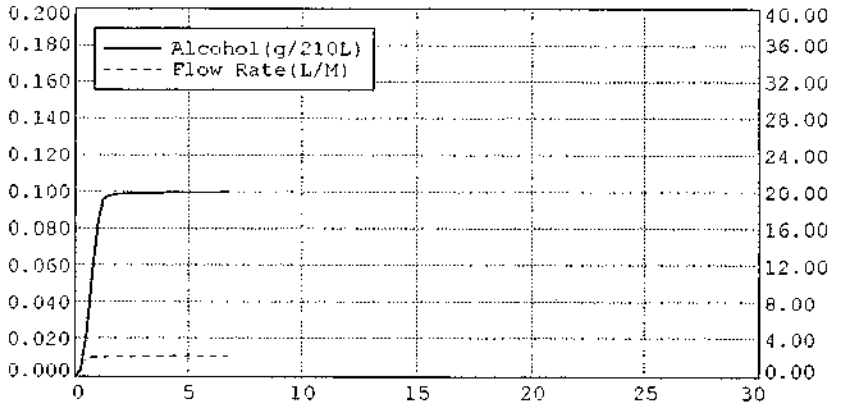
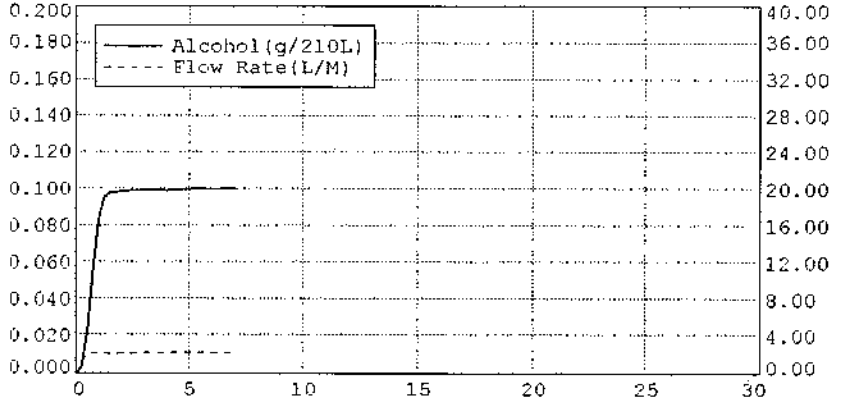
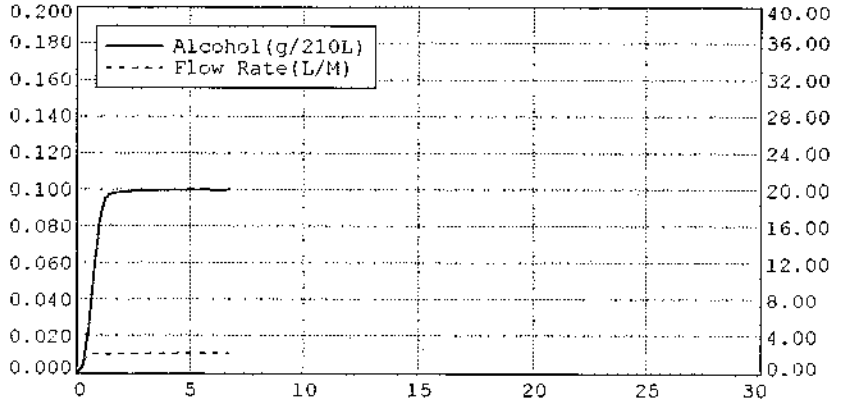
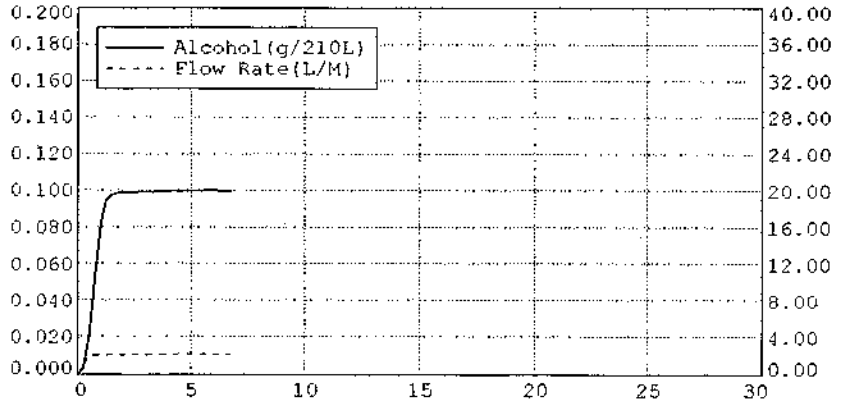
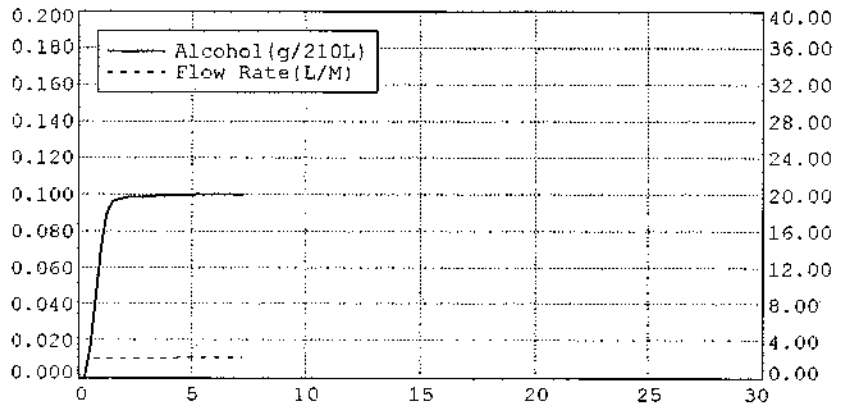
Date: 07/13/2016  
 Time: 15:01:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.96: 0.100  
 LOT #: 02915100A1  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 563 psi

BLANK TEST	0.000	15:02
INTERNAL STANDARD	VERIFIED	15:02
EXTERNAL STANDARD	0.101	15:02
BLANK TEST	0.000	15:03
EXTERNAL STANDARD	0.101	15:03
BLANK TEST	0.000	15:04
EXTERNAL STANDARD	0.101	15:04
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.101	15:06
BLANK TEST	0.000	15:06
EXTERNAL STANDARD	0.101	15:07
BLANK TEST	0.000	15:08

Average = 0.1010  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dmt: 100696

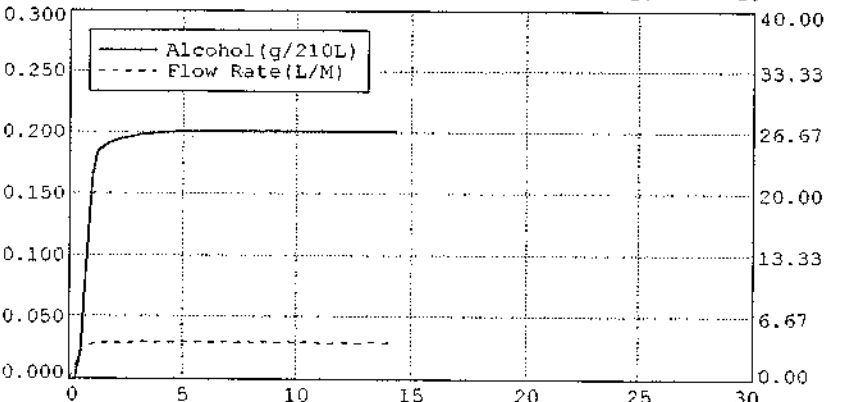
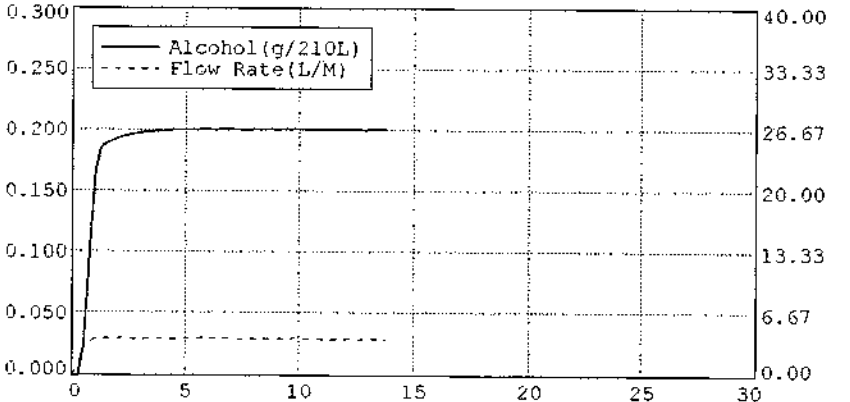
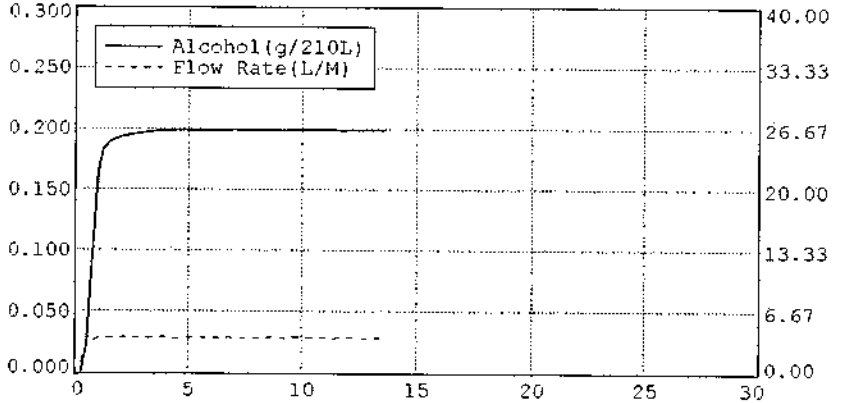
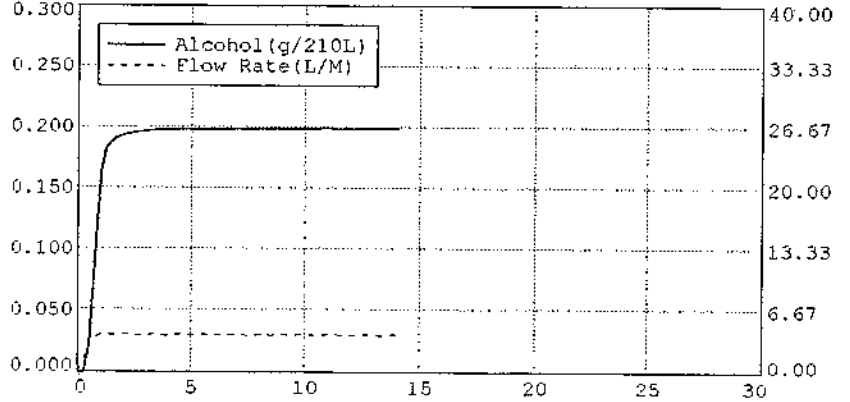
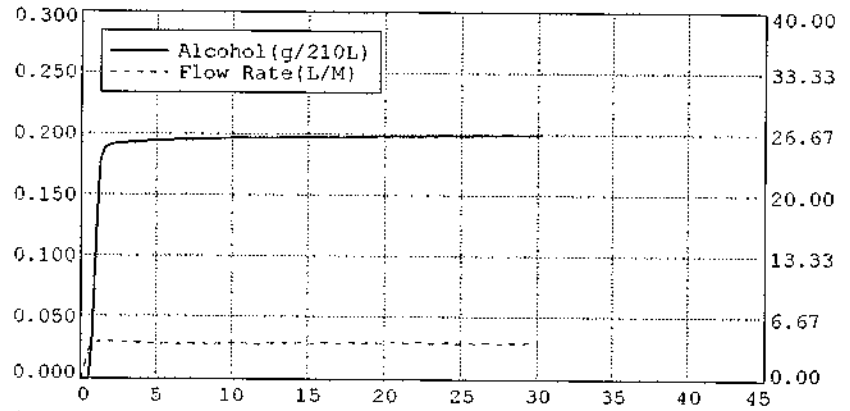
Date: 07/13/2016  
 Time: 15:09:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200  
 LOT #: 15130  
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	15:10
INTERNAL STANDARD	VERIFIED	15:11
EXTERNAL STANDARD	0.200	15:11
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.199	15:12
BLANK TEST	0.000	15:13
EXTERNAL STANDARD	0.200	15:14
BLANK TEST	0.000	15:15
EXTERNAL STANDARD	0.201	15:15
BLANK TEST	0.000	15:16
EXTERNAL STANDARD	0.201	15:16
BLANK TEST	0.000	15:17

Average = 0.2002  
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100696

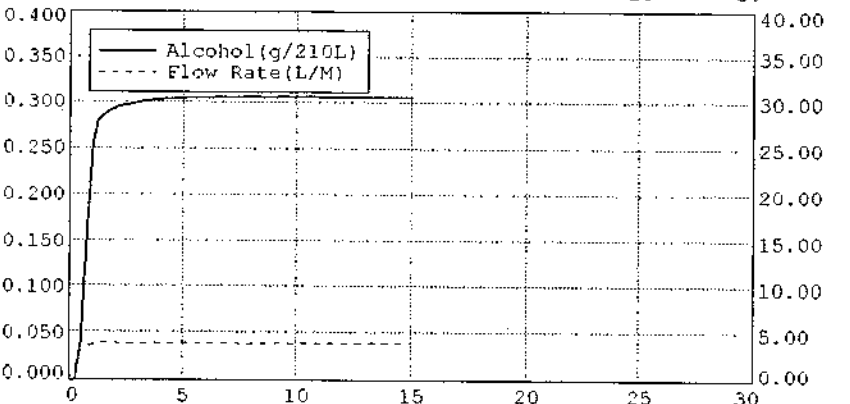
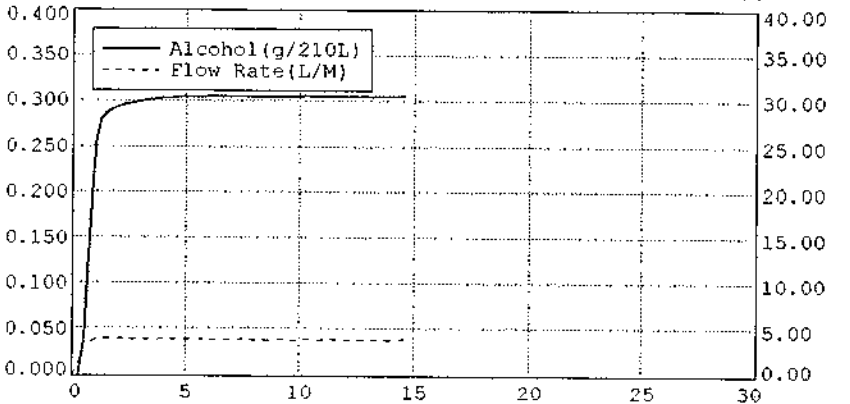
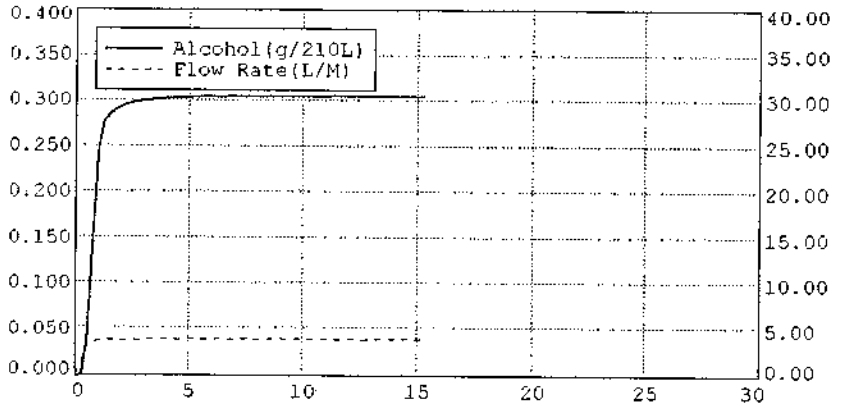
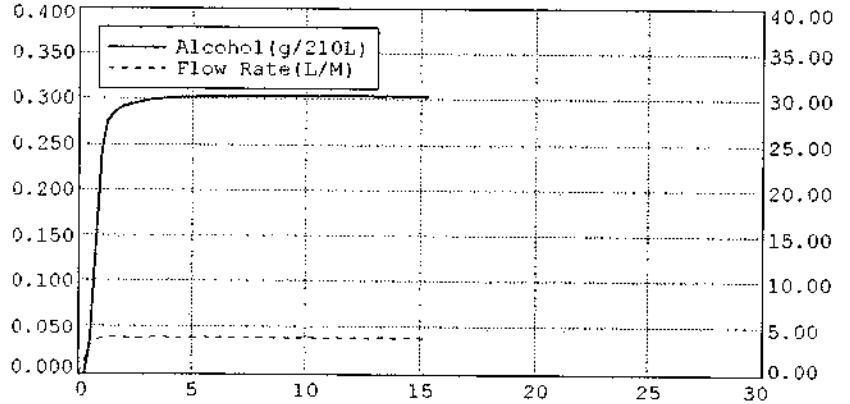
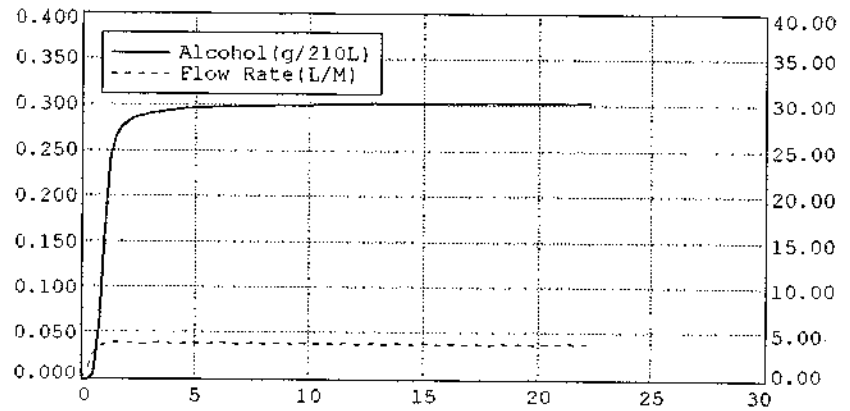
Date: 07/13/2016  
 Time: 15:19:01

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	15:20
INTERNAL STANDARD	VERIFIED	15:20
EXTERNAL STANDARD	0.303	15:20
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.303	15:22
BLANK TEST	0.000	15:22
EXTERNAL STANDARD	0.304	15:23
BLANK TEST	0.000	15:24
EXTERNAL STANDARD	0.305	15:24
BLANK TEST	0.000	15:25
EXTERNAL STANDARD	0.305	15:25
BLANK TEST	0.000	15:26

Average = 0.3040  
 Std Dev = 0.0010



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100696

Date: 07/14/2016  
Time: 07:46:28

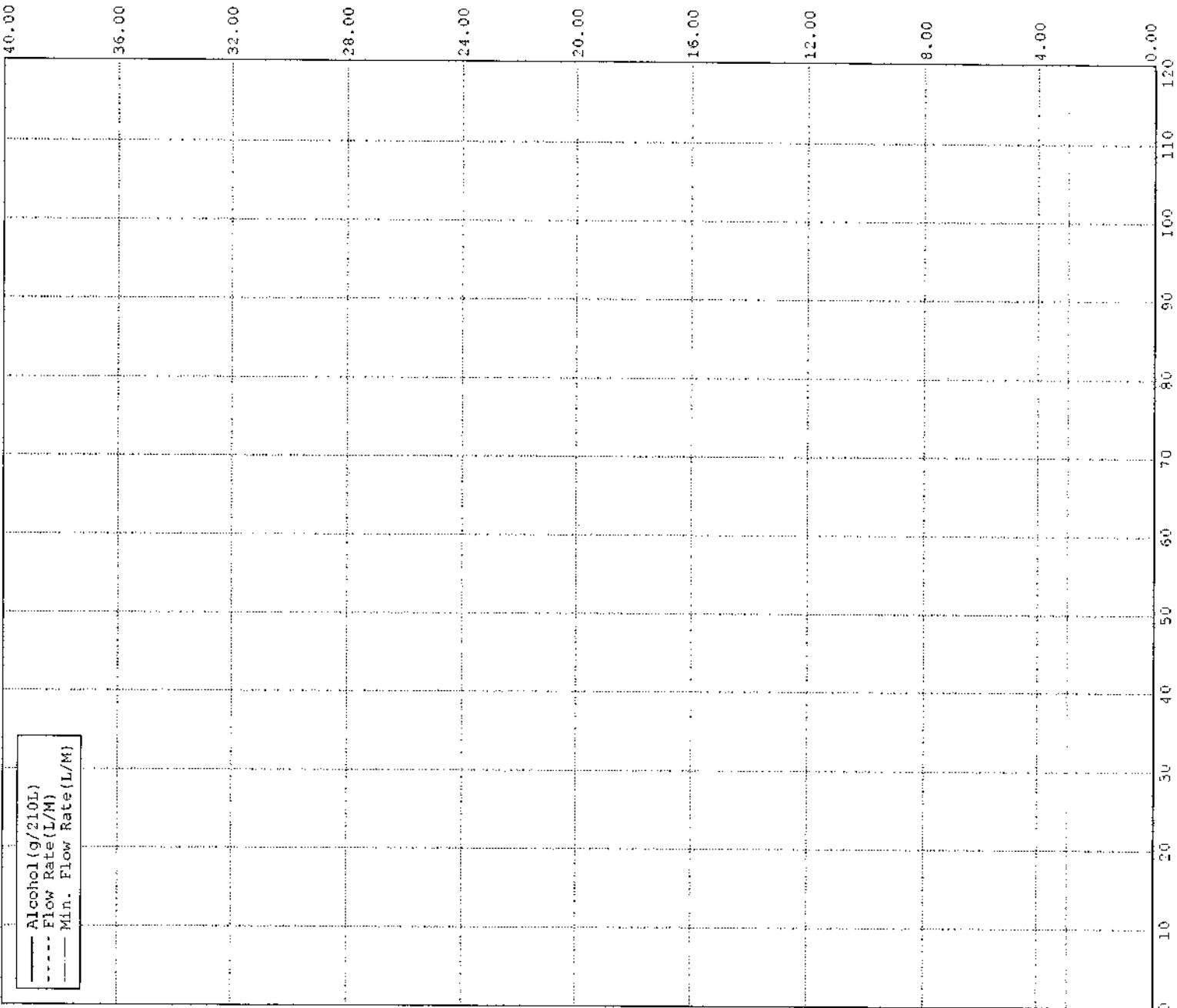
SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

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 30.12: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 07:47  
BLANK TEST 0.000 07:47  
INTERNAL STANDARD VERIFIED 07:47  
EXTERNAL STANDARD 0.081 07:47  
BLANK TEST 0.000 07:48  
SUBJECT SAMPLE INCOMPLETE 07:50



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100696

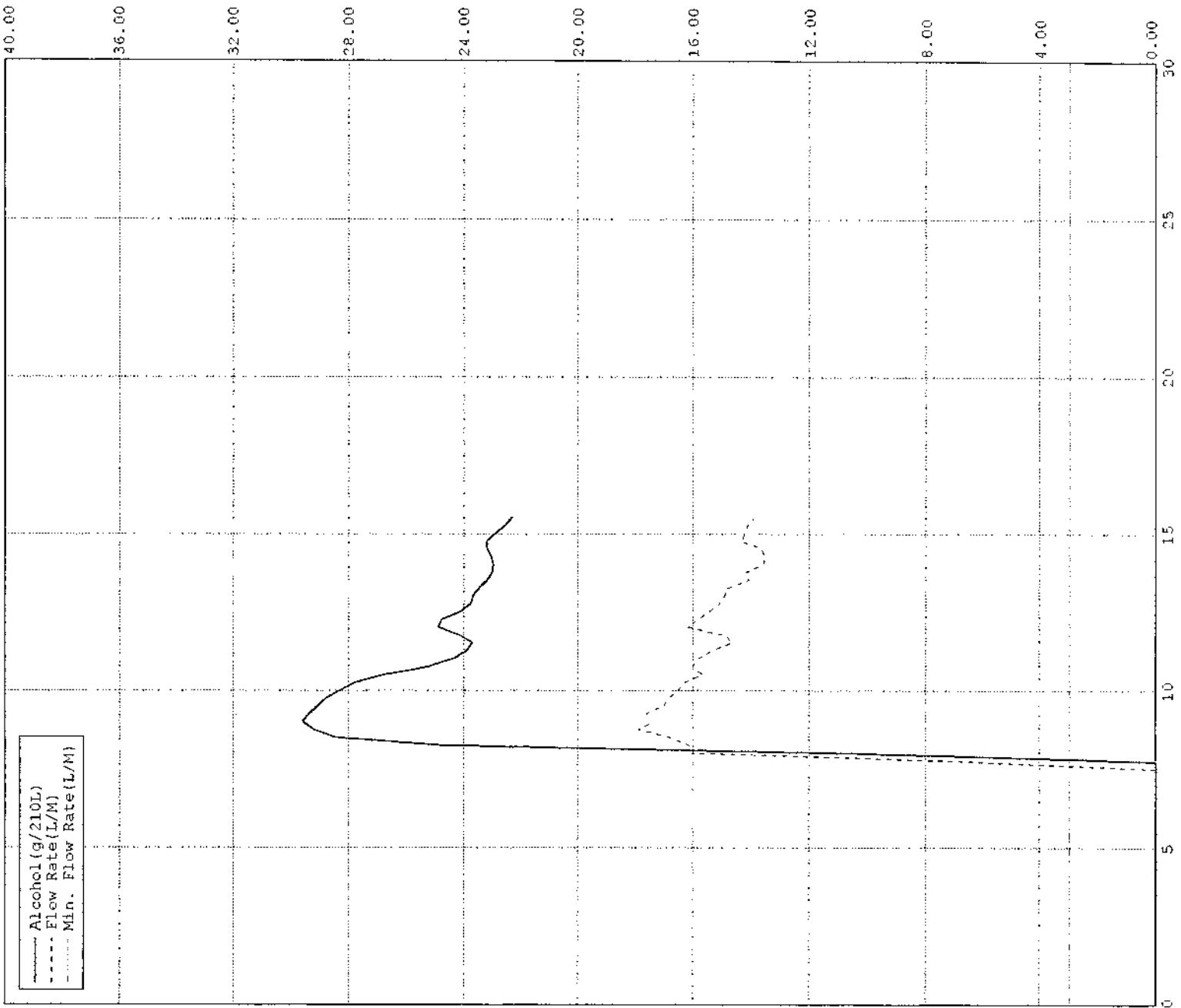
Date: 07/14/2016  
Time: 07:52:56

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 30.12: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 07:53  
BLANK TEST 0.000 07:54  
INTERNAL STANDARD VERIFIED 07:54  
EXTERNAL STANDARD 0.082 07:54  
BLANK TEST 0.000 07:55  
SUBJECT SAMPLE INVALID 07:55



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100696

Date: 07/14/2016  
Time: 07:57:34

SUBJECT NAME:  
TEST TEST  
LICENSE #: ACETONE -INT

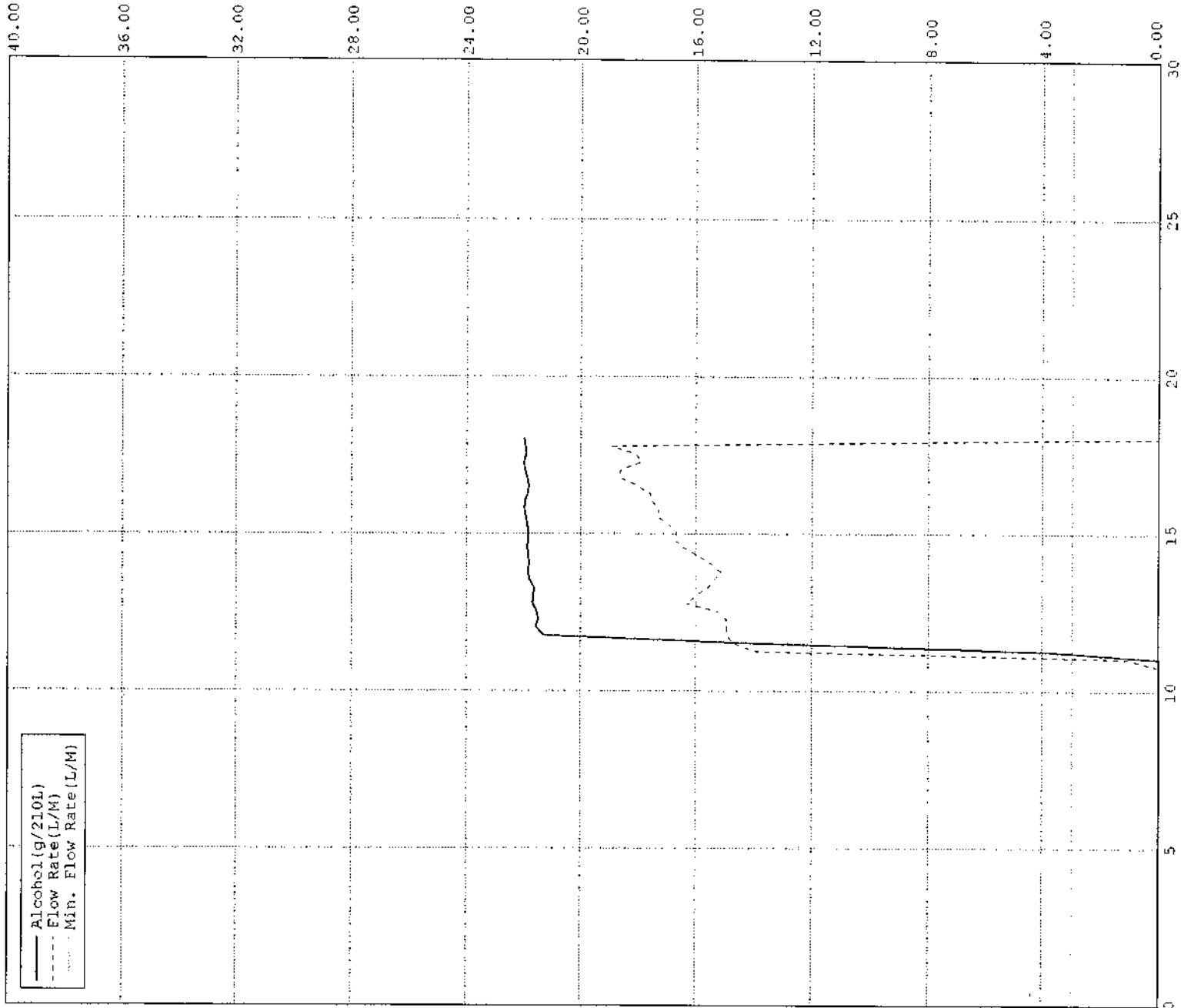
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.12: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 07:58  
BLANK TEST 0.000 07:58  
INTERNAL STANDARD VERIFIED 07:58  
Xg = 0.105 (1.36%)  
EXTERNAL STANDARD 0.081 07:59  
X[1] = 0.0813 (0.0003) (0.0017)  
BLANK TEST 0.000 08:00  
SUBJECT SAMPLE XXX 08:00  
X[1] = 0.1092 (-0.0158) (-0.0002)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100696

Date: 07/14/2016  
Time: 08:02:46

SUBJECT NAME:  
TEST TEST  
LICENSE #: IPA - INT

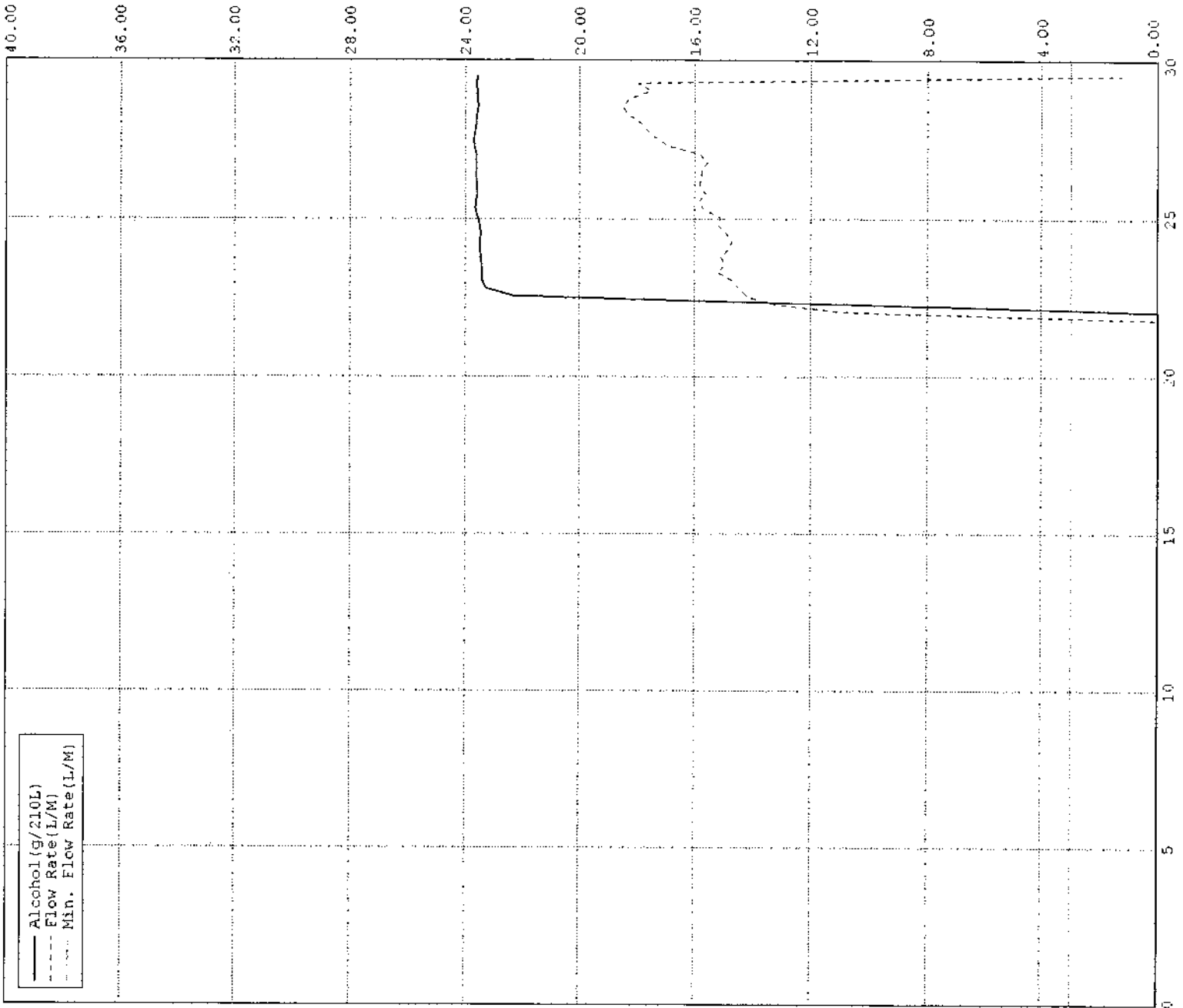
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.12: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 08:03  
BLANK TEST 0.000 08:04  
INTERNAL STANDARD VERIFIED 08:04  
Xq = 0.105 (1.27%)  
EXTERNAL STANDARD 0.081 08:04  
X[1] = 0.0813 (-0.0003) (0.0017)  
BLANK TEST 0.000 08:05  
SUBJECT SAMPLE XXX 08:05  
X[1] = 0.1172 (-0.0228) (-0.0004)

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100696

Date: 07/14/2016  
Time: 08:09:09

SUBJECT NAME:  
TEST TEST  
LICENSE #: NEGATIVE INT

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

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

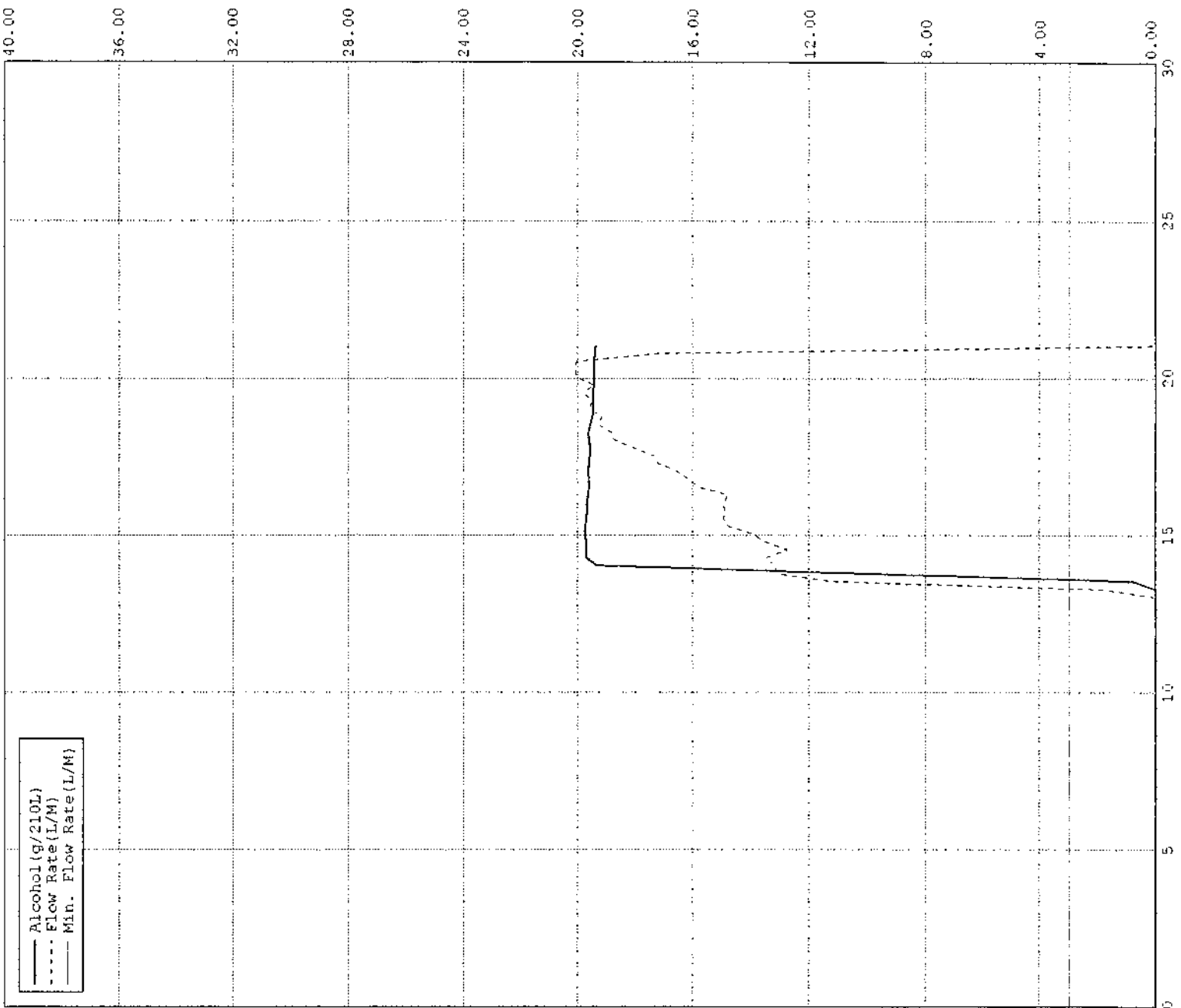
EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.12: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:10
BLANK TEST	0.000	08:10
INTERNAL STANDARD	VERIFIED	08:10
Xq = 0.105 (1.70%)		
EXTERNAL STANDARD	0.082	08:10
X[1] = 0.0819	(0.0002)	(0.0034)
BLANK TEST	0.000	08:11
SUBJECT SAMPLE (Vol=2.08L)	0.096	08:12
X[1] = 0.0962	(0.0018)	(0.0002)
BLANK TEST	0.000	08:13
EXTERNAL STANDARD	0.081	08:13
X[1] = 0.0808	(-0.0005)	(0.0011)
BLANK TEST	0.000	08:14

*Filter 2 avg = -0.0001*

*Filter 3 avg = 0.0020*

*CSB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100696

Date: 07/14/2016  
Time: 08:22:50

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

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

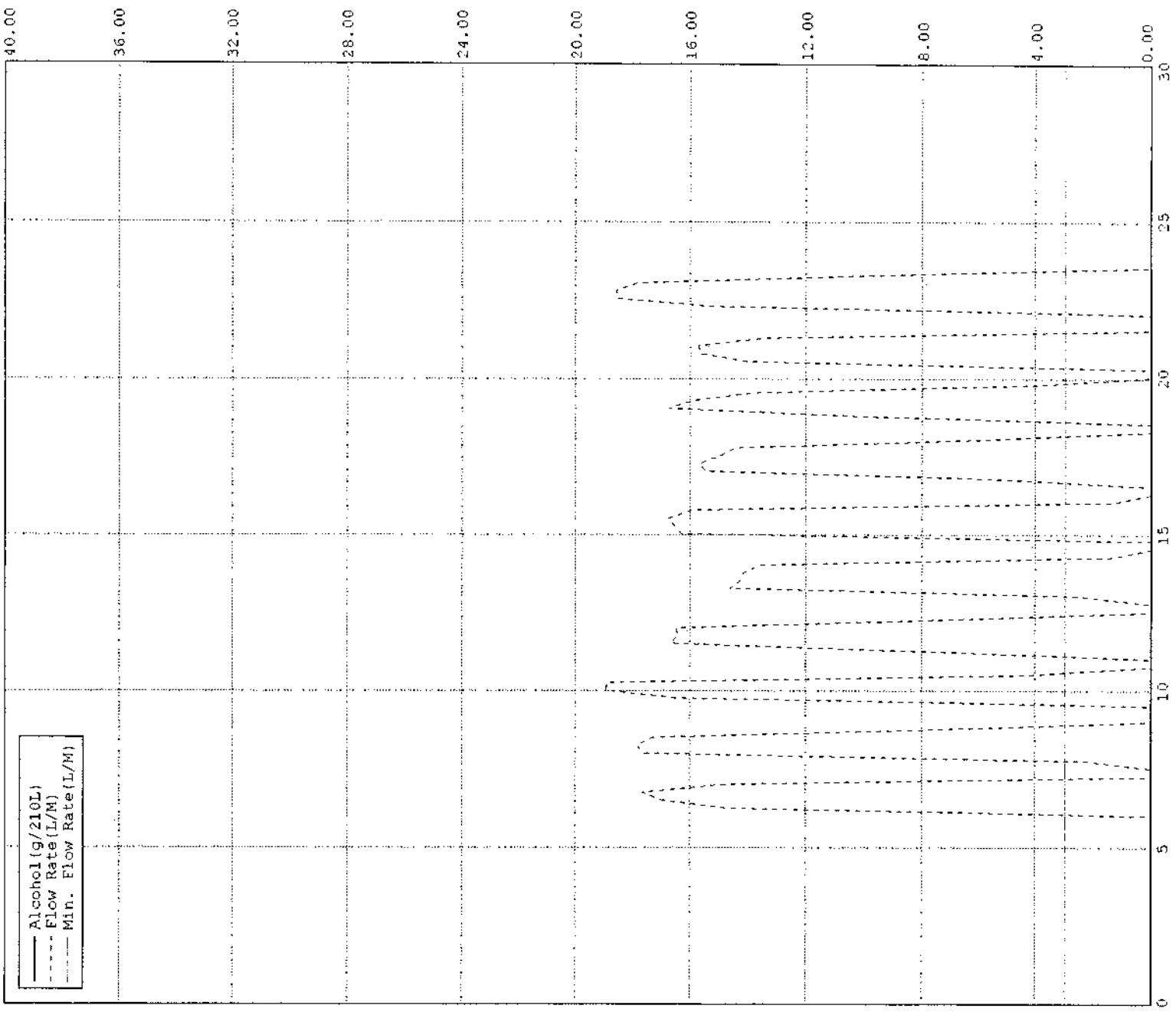
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.12: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 08:24  
BLANK TEST 0.000 08:24  
INTERNAL STANDARD VERIFIED 08:24  
EXTERNAL STANDARD 0.081 08:24  
BLANK TEST 0.000 08:25  
SUBJECT SAMPLE XXX 08:26

Maximum Attempts Exceeded

*CB*



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100696

Date: 07/14/2016

Time: 08:29:03

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 30.12: 0.081

LOT #: AG608504

EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK

PASSED 08:30

BLANK TEST 0.000 08:30

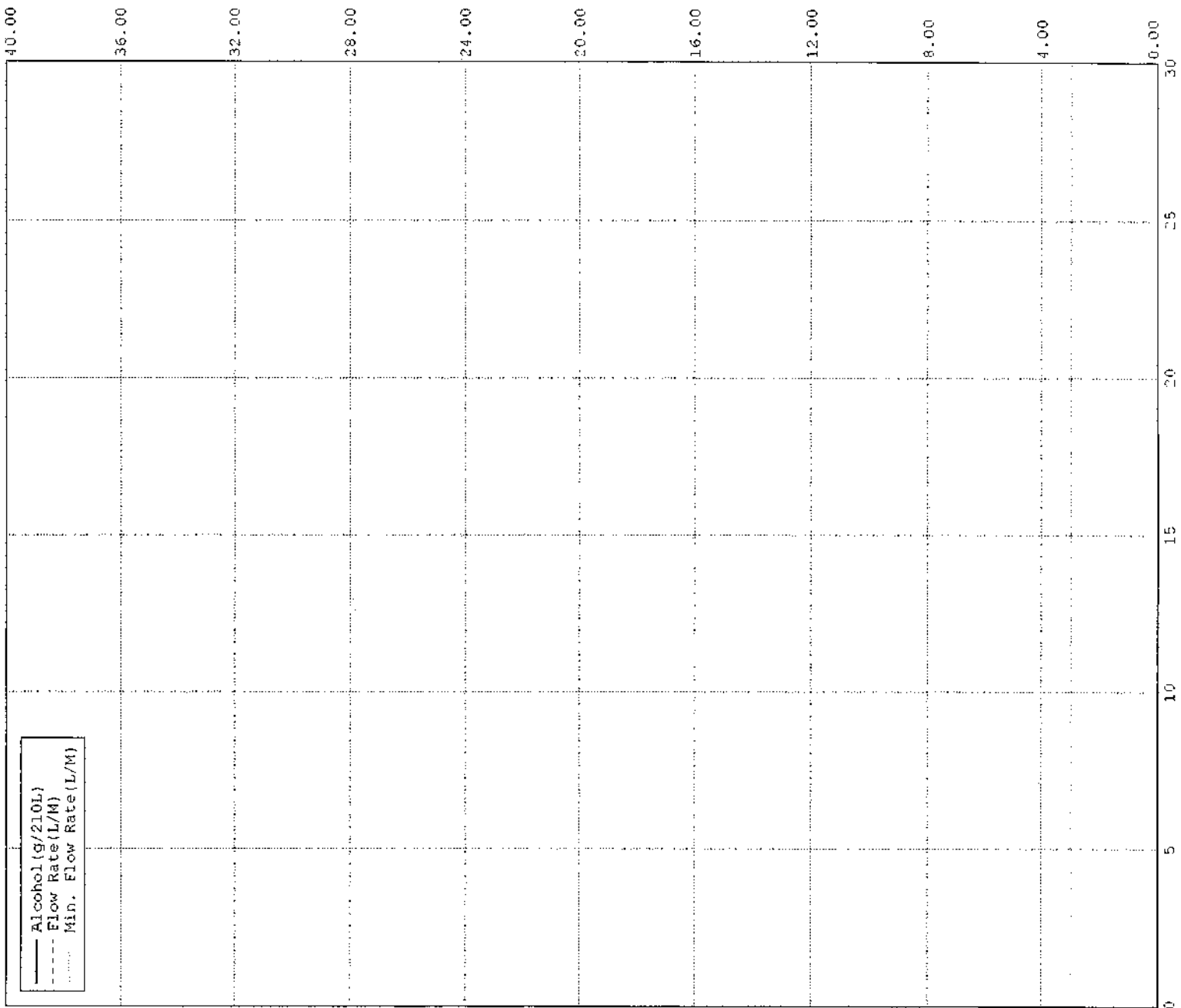
INTERNAL STANDARD VERIFIED 08:30

EXTERNAL STANDARD 0.082 08:31

BLANK TEST 0.000 08:32

RFI DETECTED

*CSB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100696

Date: 07/14/2016  
Time: 08:46:44

SUBJECT NAME:  
TEST TEST  
LICENSE #: NON DRINKING

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

DEPT/AGENCY:  
AAA1

CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 30.12: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:47
BLANK TEST	0.000	08:47
INTERNAL STANDARD	VERIFIED	08:48
EXTERNAL STANDARD	0.081	08:48
BLANK TEST	0.000	08:49
SUBJECT SAMPLE (Vol=2.25L)	0.000	08:49
BLANK TEST	0.000	08:50
EXTERNAL STANDARD	0.082	08:50
BLANK TEST	0.000	08:51

*CS*

