

# 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 100670 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 1.5 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

i. 0.020g/210L Mnf ILMO Lot 02915030A2 Exp 3/5/17

ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17

iii. 0.080g/210L Mnf Argas Lot AG608504 Exp 3/25/18

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

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

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

vi. 0.300g/210L Mnf GUTH 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 GUTH Lot 15220 Level 0.100 Exp 9/28/17

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

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

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

iii. Negative Control - Mnf GUTH 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: 100670  
-----

Date: 07/13/2016  
Time: 13:22:46

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 = 48.1°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.74 V PASSED  
(1.05 V - 2.45 V)  
Cooler Voltage = 1.76 V PASSED  
(1.01 V - 2.35 V)  
Bias Voltage = 79 V PASSED  
(47 V - 111 V)  
Chopper Freq = 545 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 30.1 in

PUMP INFO

Flow Rate = 4.894 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 = 0.087 1.48% (0.00% - 4.00%) PASSED

Technician Screen

-----  
DATAMASTER dmt: 100670  
-----

Date: 07/13/2016  
Time: 2:18 PM

Temperatures (°C)

Sample Cell: 48.7°C  
Breath Tube: 48.0°C

Current Barometer 30.0 in  
Volume (Ltr) 1.51

Settings

Lamp: 1.74 V  
Bias: 80 V  
Cooler: 1.79 V  
Chopper: 544 Hz

Voltages (V)

Flow: 1.04 V  
Detector: 0.029 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100670  
-----

Date: 09/21/2011  
Time: 14:17:27

Ca = 0.1500  
CAL = 0.983698    0.800 <= CAL < 1.200  
b1 = 0.0002    0.0000 <= b1 < 0.0040  
b2 = 0.0023    0.0010 <= b2 < 0.0100  
b3 = 0.0000    0.0000 <= b3 < 0.0040  
Xq = 0.0886    0.0500 <= Xq < 0.2000  
a21 = 1.179698    1.050 <= a21 < 1.300  
a31 = 0.439665    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100670

Date: 07/13/2016

Time: 14:19:05

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

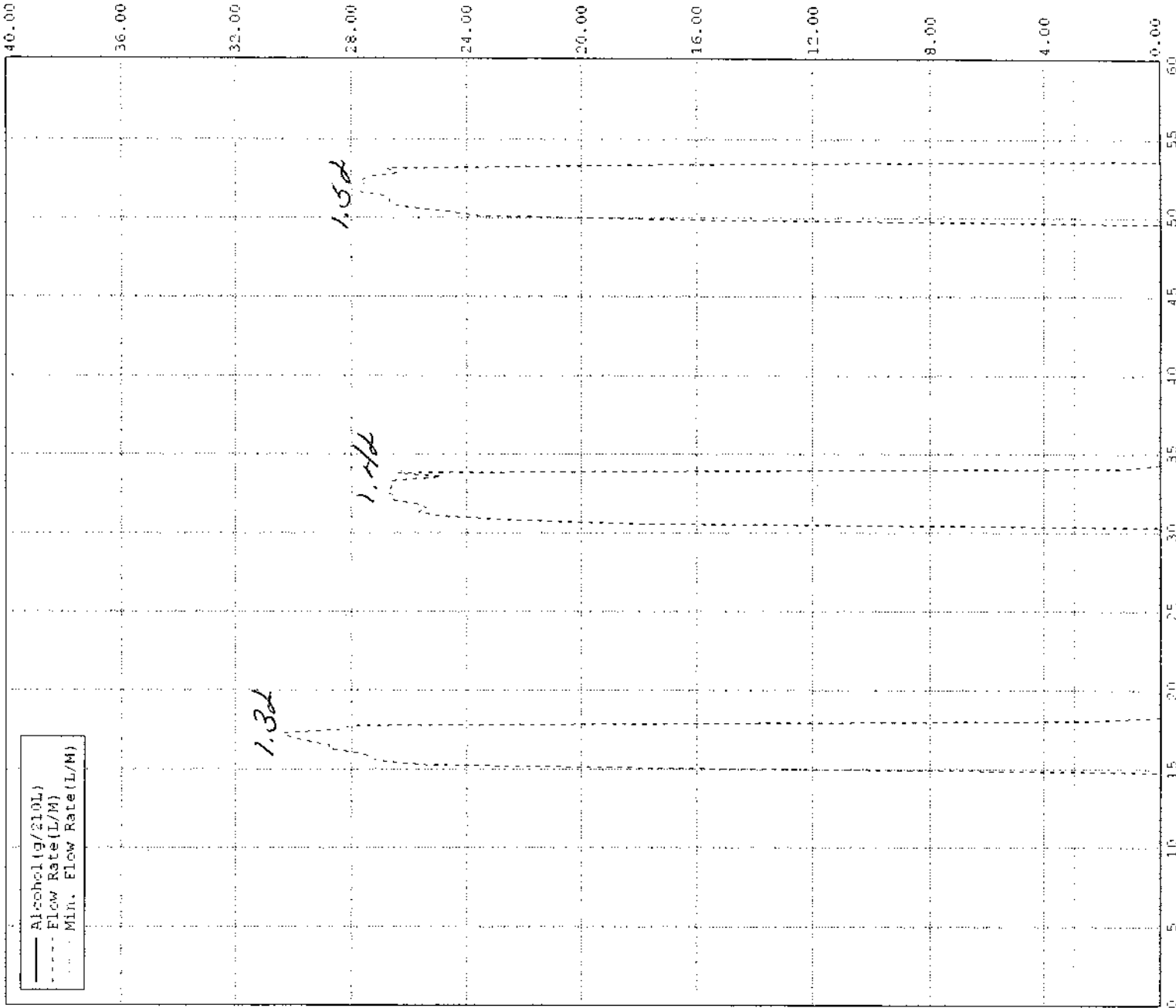
NOMINAL: 0.080

TARGET AT 29.97: 0.080

LOT #: AG608504

EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:20
BLANK TEST	0.000	14:20
INTERNAL STANDARD	VERIFIED	14:20
EXTERNAL STANDARD	0.080	14:20
BLANK TEST	0.000	14:21
SUBJECT SAMPLE (Vol=1.58L)	0.000	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.080	14:23
BLANK TEST	0.000	14:24



LINEARITY CHECK

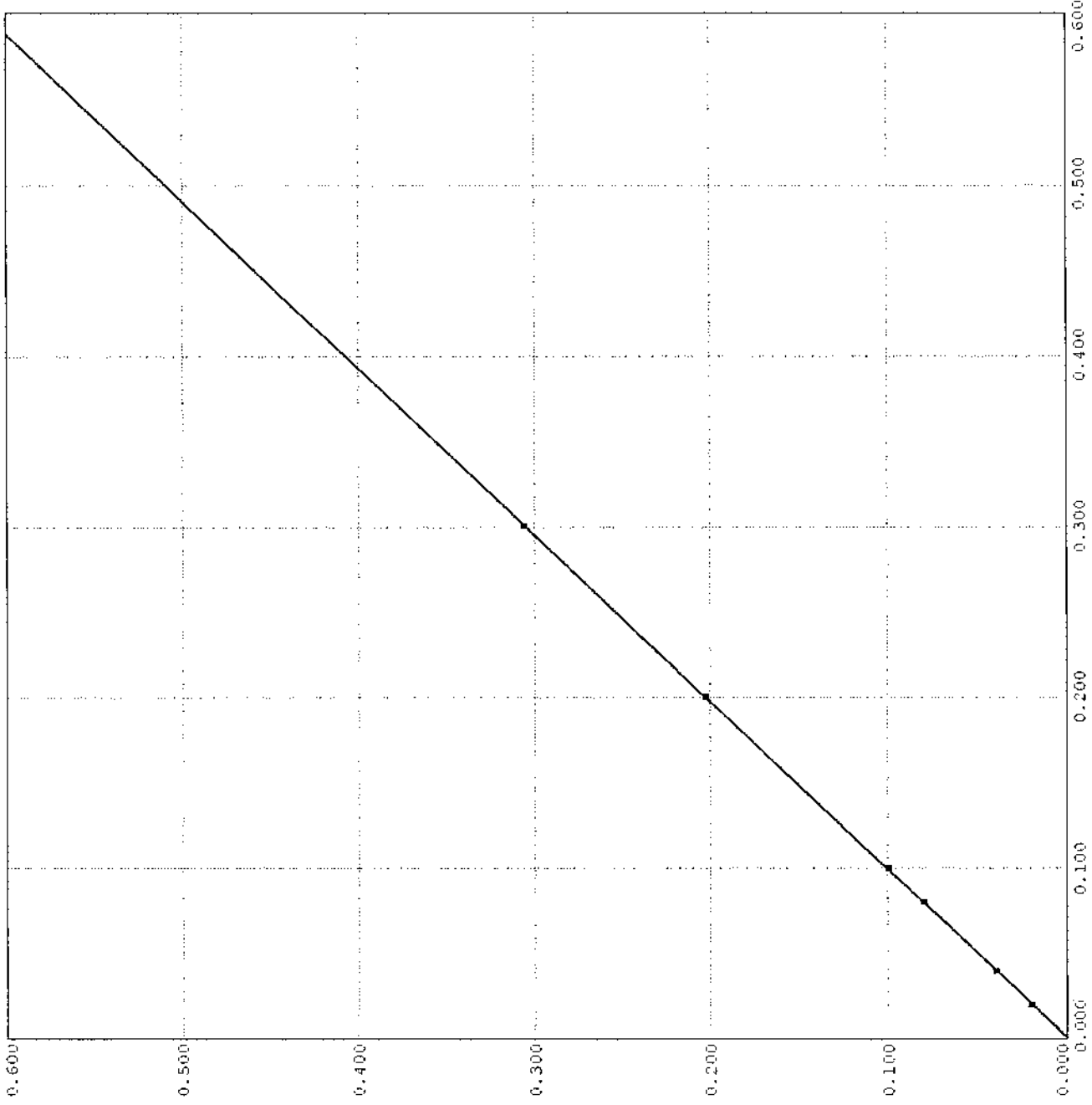
Alaska Department of Public Safety  
DATAMASTER dmt: 100670

Date: 07/13/2016  
Time: 14:53:08

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0208	0.0004
0.040	0.0406	0.0005
0.080	0.0810	0.0000
0.100	0.1004	0.0005
0.200	0.2034	0.0009
0.300	0.3068	0.0004

SLOPE = 1.022345  
R<sup>2</sup> = 0.999945



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100670

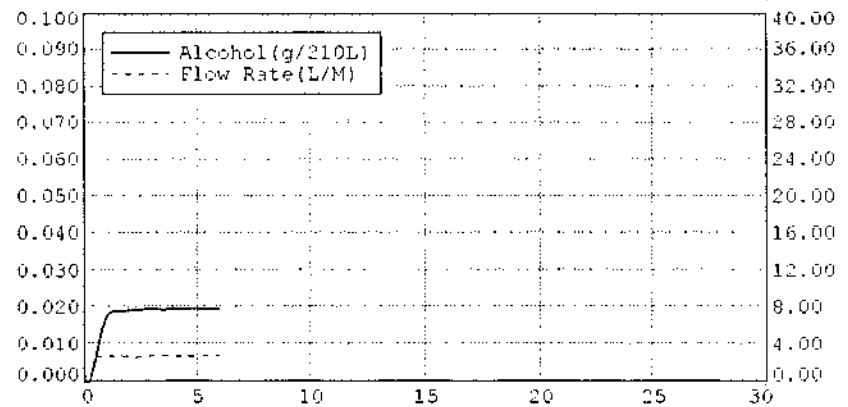
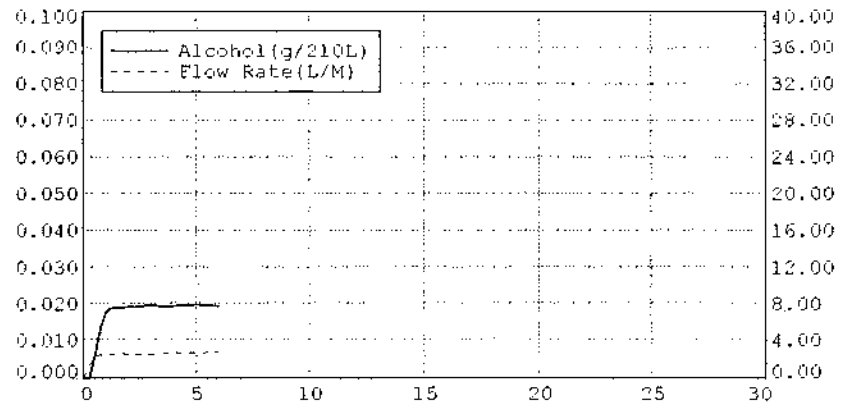
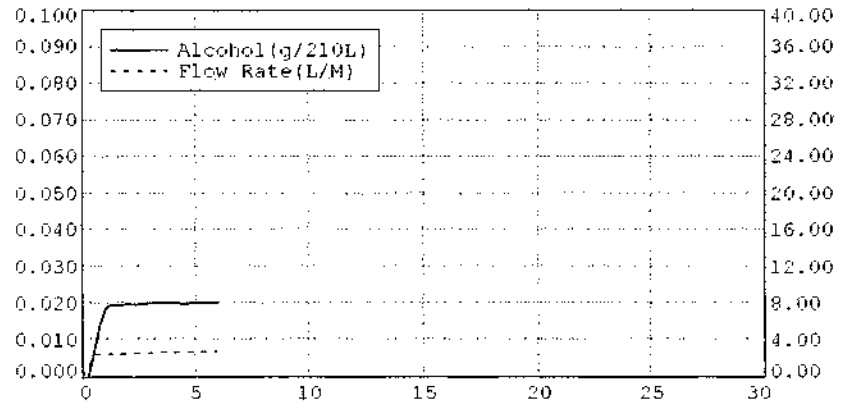
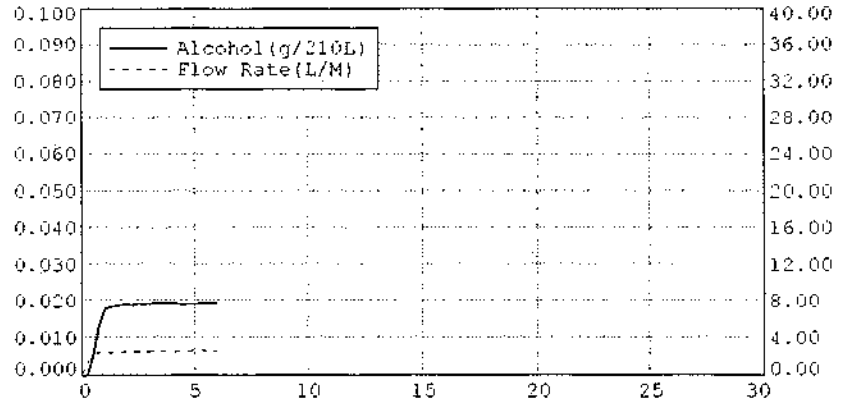
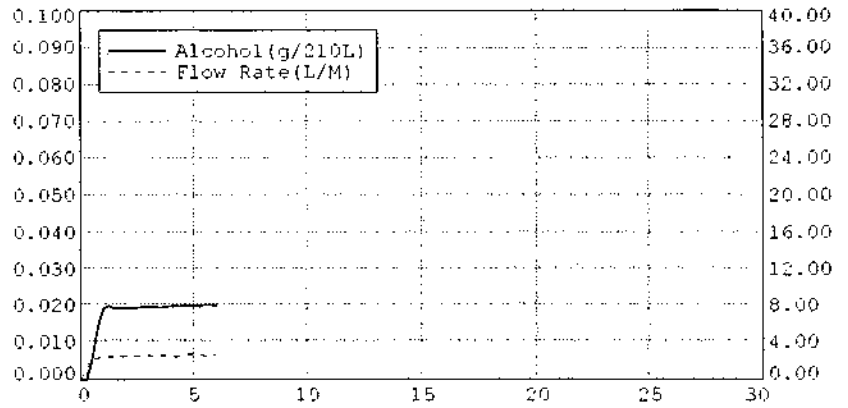
Date: 07/13/2016  
 Time: 14:53:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.96: 0.020  
 LOT #: 02915020A2  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 795 psi

BLANK TEST	0.000	15:00
INTERNAL STANDARD	VERIFIED	15:00
EXTERNAL STANDARD	0.021	15:00
BLANK TEST	0.000	15:01
EXTERNAL STANDARD	0.021	15:01
BLANK TEST	0.000	15:02
EXTERNAL STANDARD	0.021	15:02
BLANK TEST	0.000	15:03
EXTERNAL STANDARD	0.020	15:03
BLANK TEST	0.000	15:04
EXTERNAL STANDARD	0.021	15:04
BLANK TEST	0.000	15:05

Average = 0.0208  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100670

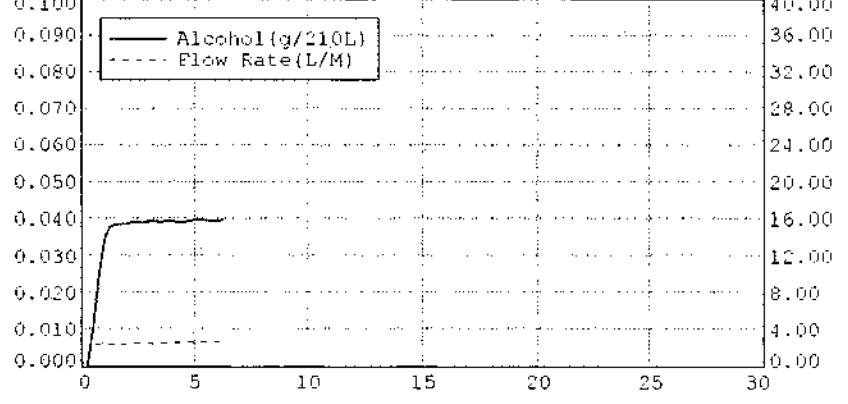
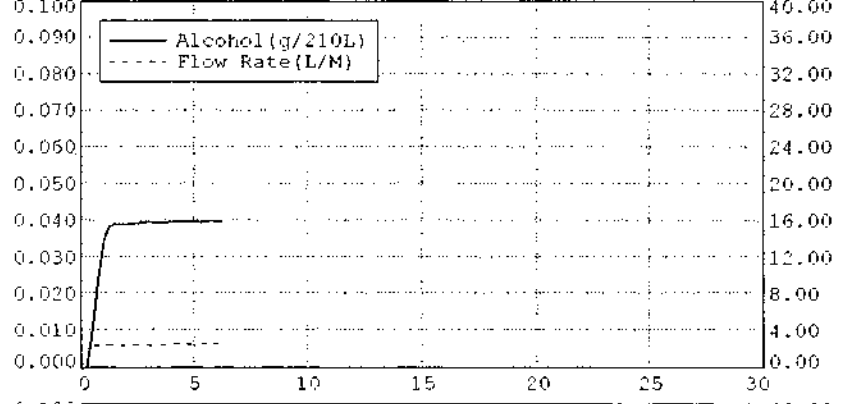
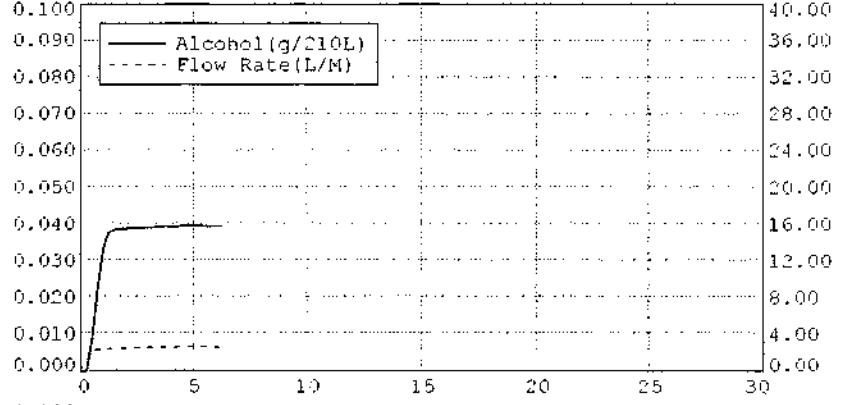
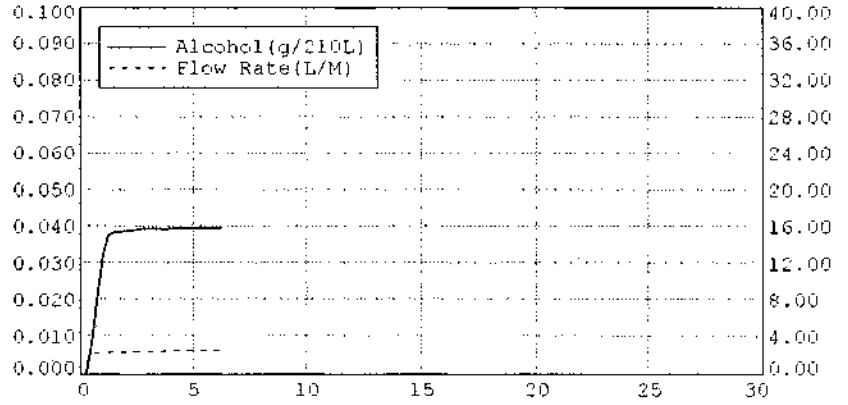
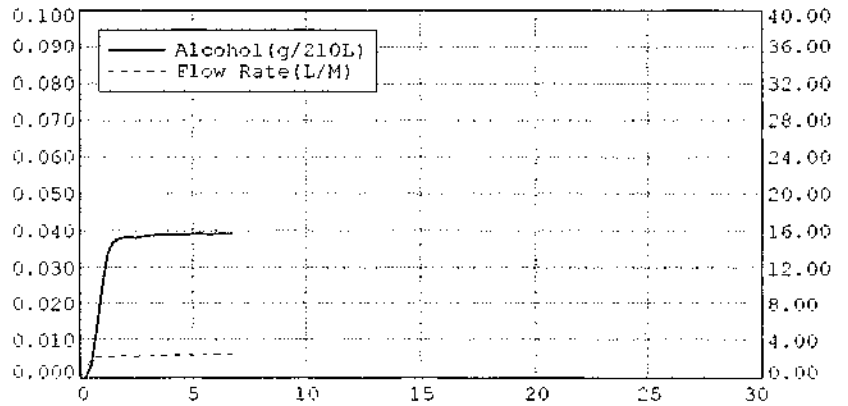
Date: 07/13/2016  
 Time: 15:07:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.95: 0.040  
 LOT #: 02915040A3  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 259 psi

BLANK TEST	0.000	15:08
INTERNAL STANDARD	VERIFIED	15:08
EXTERNAL STANDARD	0.040	15:08
BLANK TEST	0.000	15:09
EXTERNAL STANDARD	0.041	15:09
BLANK TEST	0.000	15:10
EXTERNAL STANDARD	0.040	15:10
BLANK TEST	0.000	15:11
EXTERNAL STANDARD	0.041	15:12
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.041	15:13
BLANK TEST	0.000	15:14

Average = 0.0406  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100670

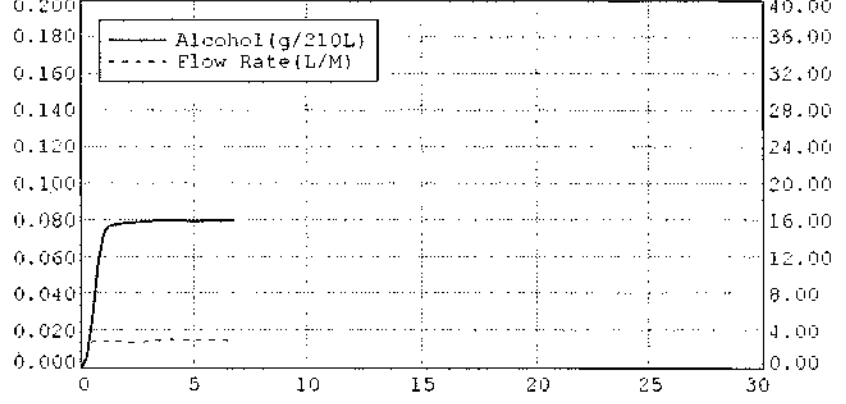
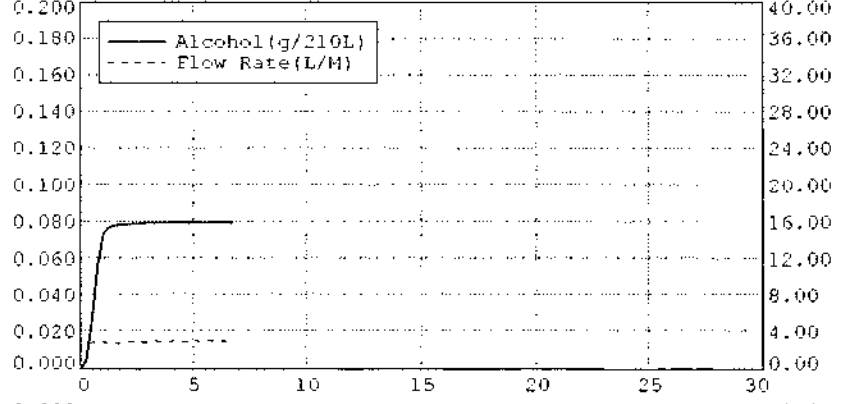
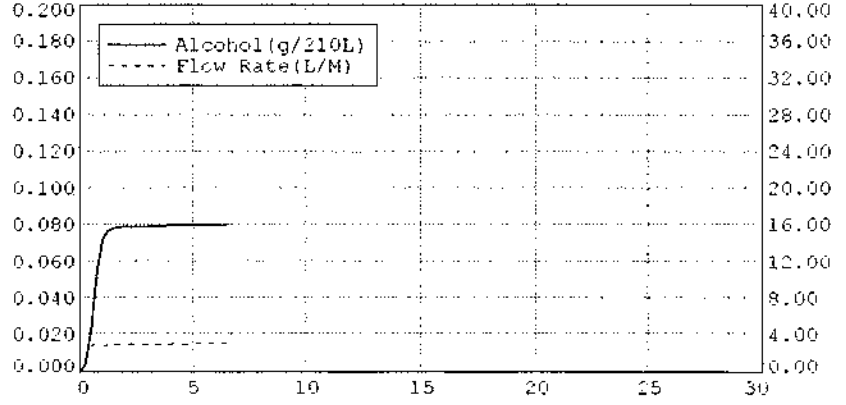
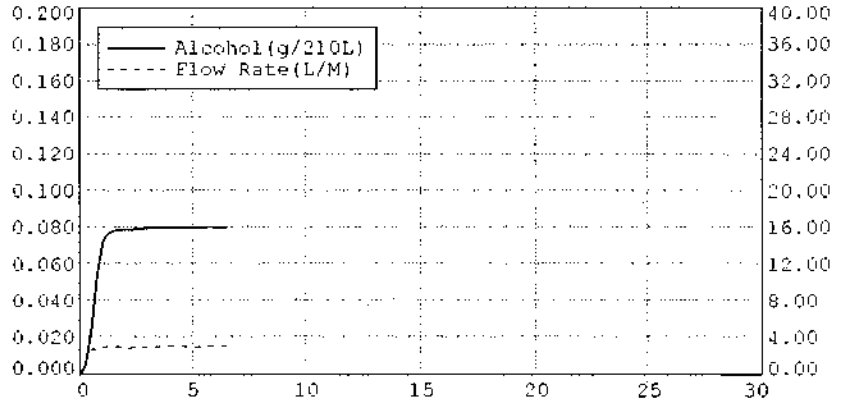
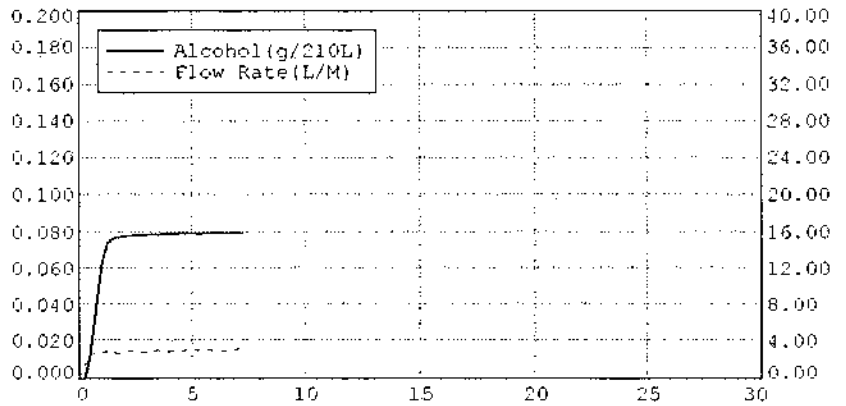
Date: 07/13/2016  
 Time: 15:15:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.95: 0.080  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018  
 TANK PRESSURE: 1014 psi

BLANK TEST	0.000	15:16
INTERNAL STANDARD	VERIFIED	15:16
EXTERNAL STANDARD	0.081	15:17
BLANK TEST	0.000	15:18
EXTERNAL STANDARD	0.081	15:18
BLANK TEST	0.000	15:19
EXTERNAL STANDARD	0.081	15:19
BLANK TEST	0.000	15:20
EXTERNAL STANDARD	0.081	15:20
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.081	15:21
BLANK TEST	0.000	15:22

Average = 0.0810  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100670

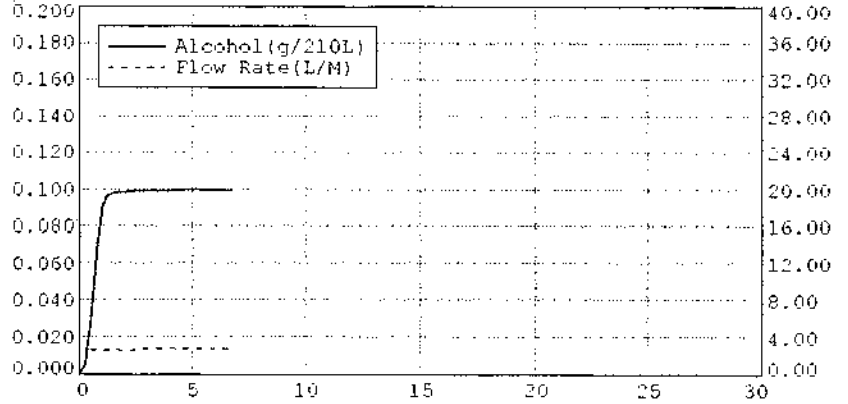
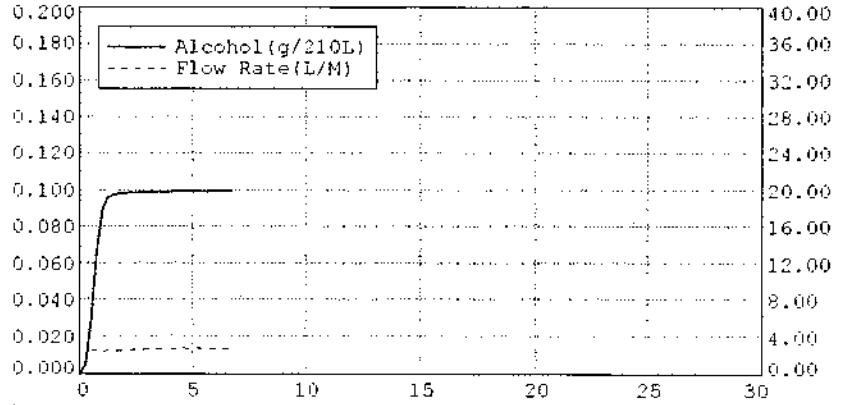
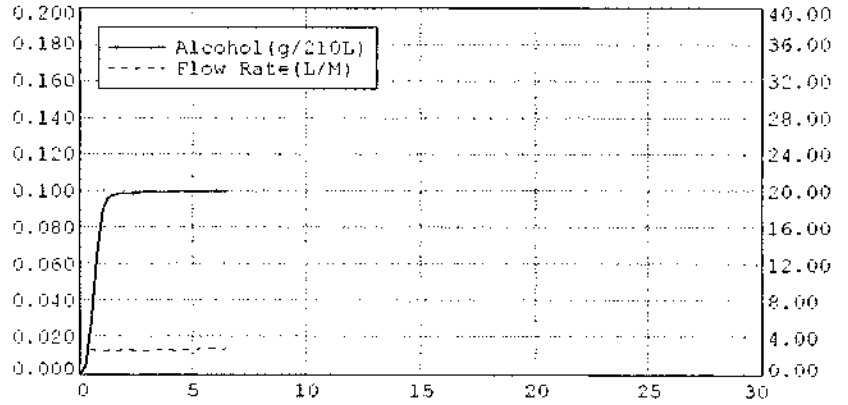
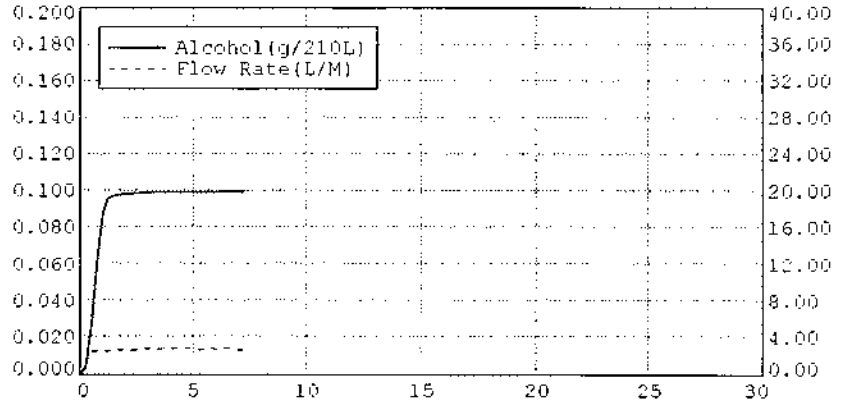
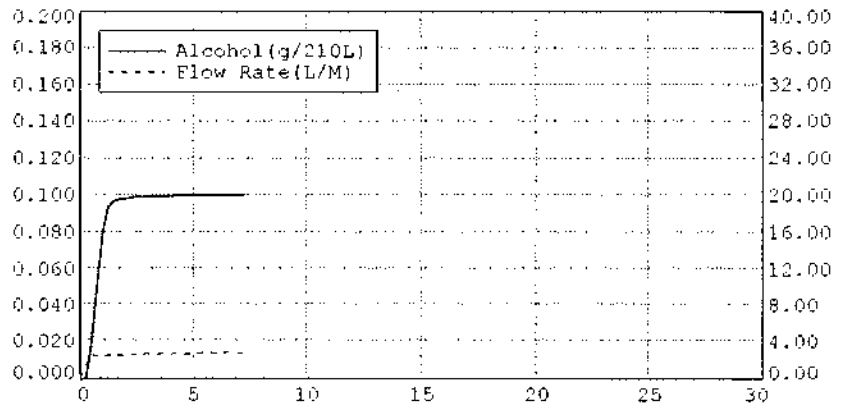
Date: 07/13/2016  
 Time: 15:24:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.96: 0.100  
 LOT #: 02915100A1  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 519 psi

BLANK TEST	0.000	15:25
INTERNAL STANDARD	VERIFIED	15:25
EXTERNAL STANDARD	0.101	15:25
BLANK TEST	0.000	15:26
EXTERNAL STANDARD	0.100	15:26
BLANK TEST	0.000	15:27
EXTERNAL STANDARD	0.100	15:28
BLANK TEST	0.000	15:28
EXTERNAL STANDARD	0.100	15:29
BLANK TEST	0.000	15:30
EXTERNAL STANDARD	0.101	15:30
BLANK TEST	0.000	15:31

Average = 0.1004  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

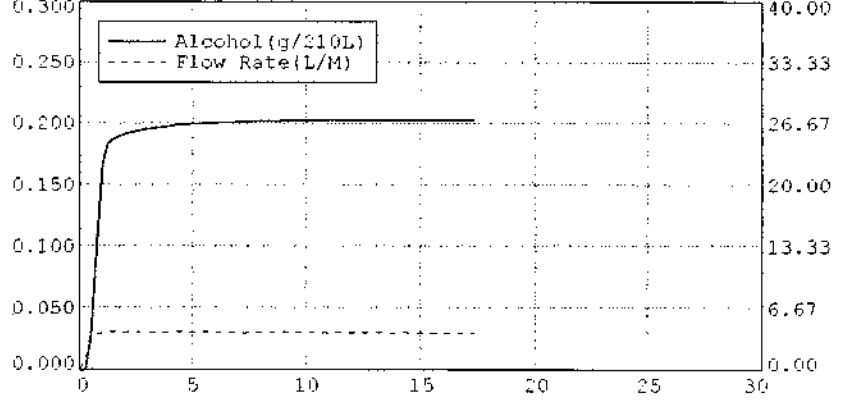
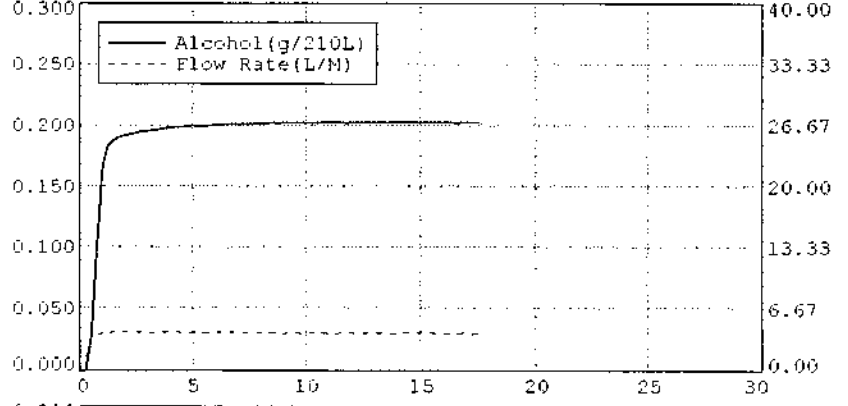
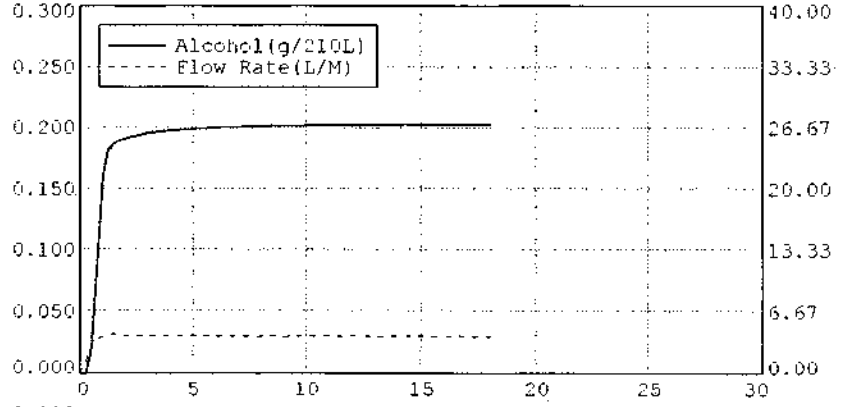
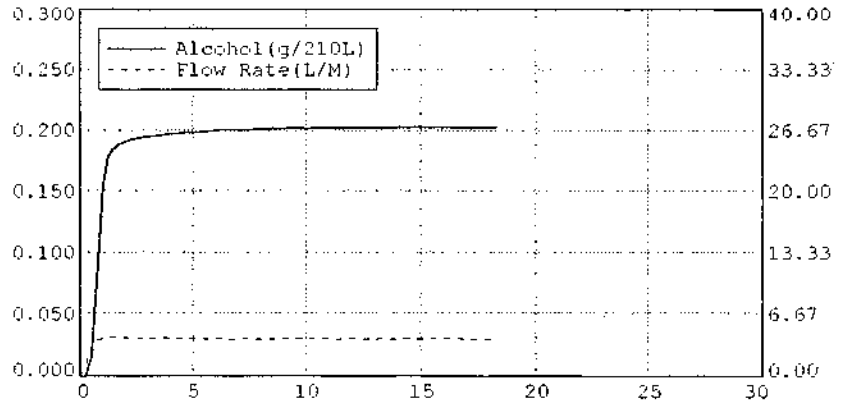
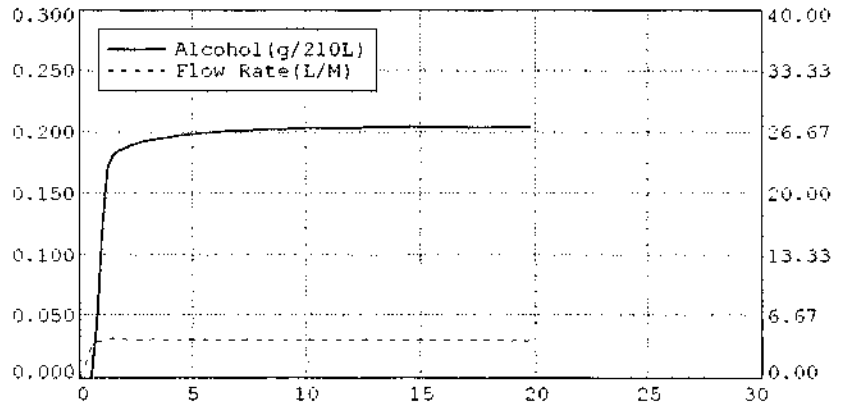
Alaska Department of Public Safety  
 DATAMASTER dmt: 100670

Date: 07/13/2016  
 Time: 15:31:50

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

BLANK TEST	0.000	15:32
INTERNAL STANDARD	VERIFIED	15:33
EXTERNAL STANDARD	0.205	15:33
BLANK TEST	0.000	15:34
EXTERNAL STANDARD	0.203	15:35
BLANK TEST	0.000	15:36
EXTERNAL STANDARD	0.203	15:36
BLANK TEST	0.000	15:37
EXTERNAL STANDARD	0.203	15:37
BLANK TEST	0.000	15:38
EXTERNAL STANDARD	0.203	15:39
BLANK TEST	0.000	15:40

Average = 0.2034  
 Std Dev = 0.0009



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100670

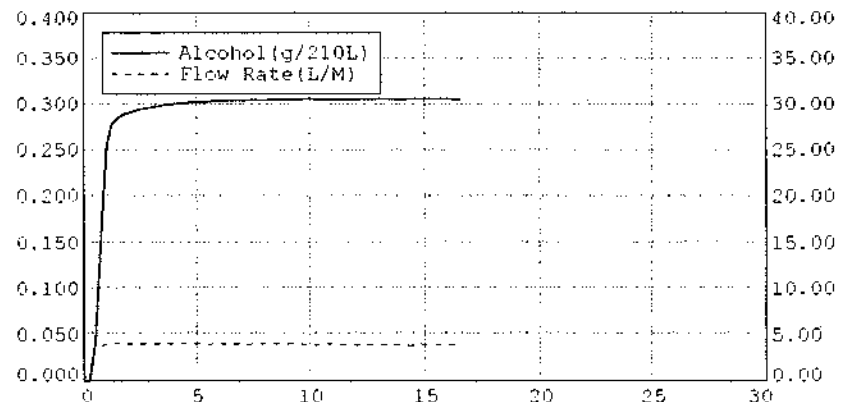
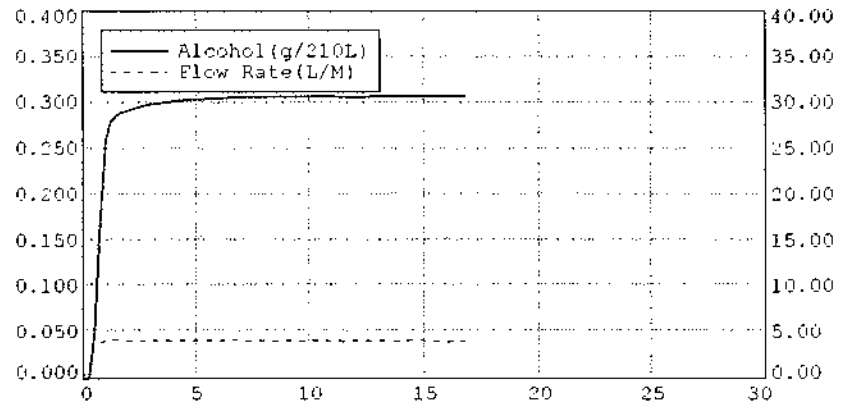
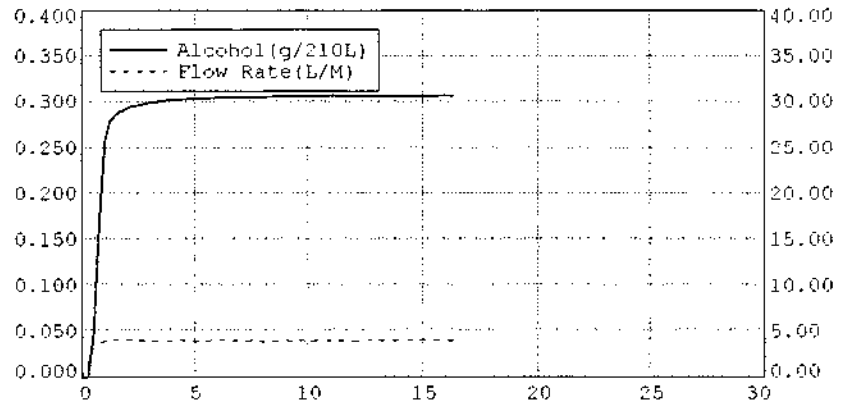
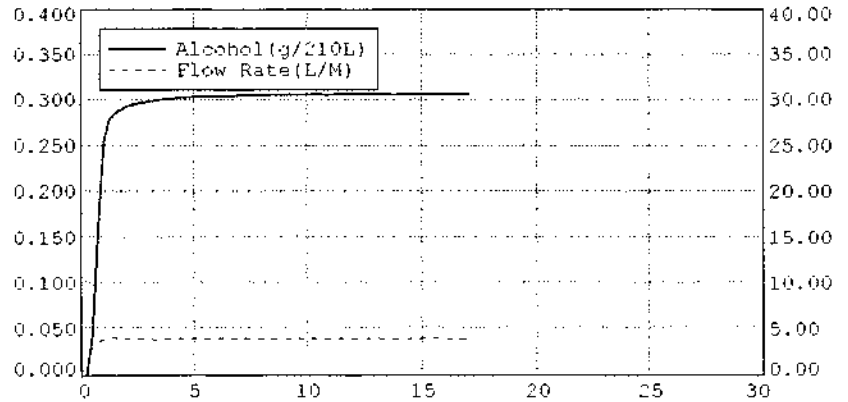
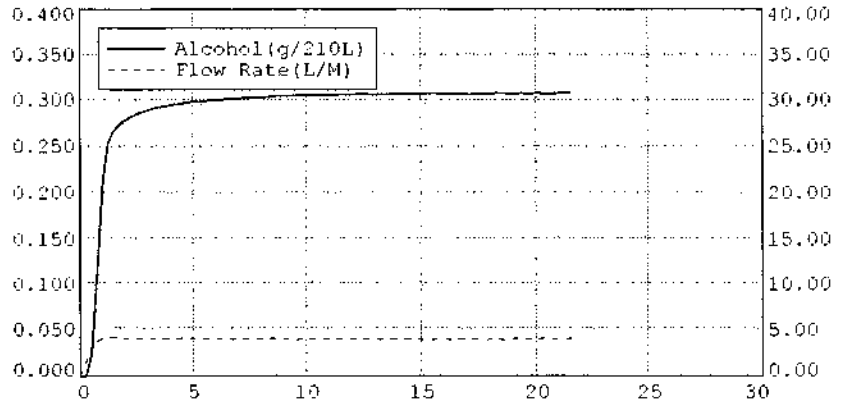
Date: 07/13/2016  
 Time: 15:50:40

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	15:51
INTERNAL STANDARD	VERIFIED	15:51
EXTERNAL STANDARD	0.307	15:52
BLANK TEST	0.000	15:53
EXTERNAL STANDARD	0.307	15:53
BLANK TEST	0.000	15:54
EXTERNAL STANDARD	0.307	15:54
BLANK TEST	0.000	15:55
EXTERNAL STANDARD	0.307	15:56
BLANK TEST	0.000	15:57
EXTERNAL STANDARD	0.306	15:57
BLANK TEST	0.000	15:58

Average = 0.3068  
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

Date: 07/14/2016  
Time: 07:50:45

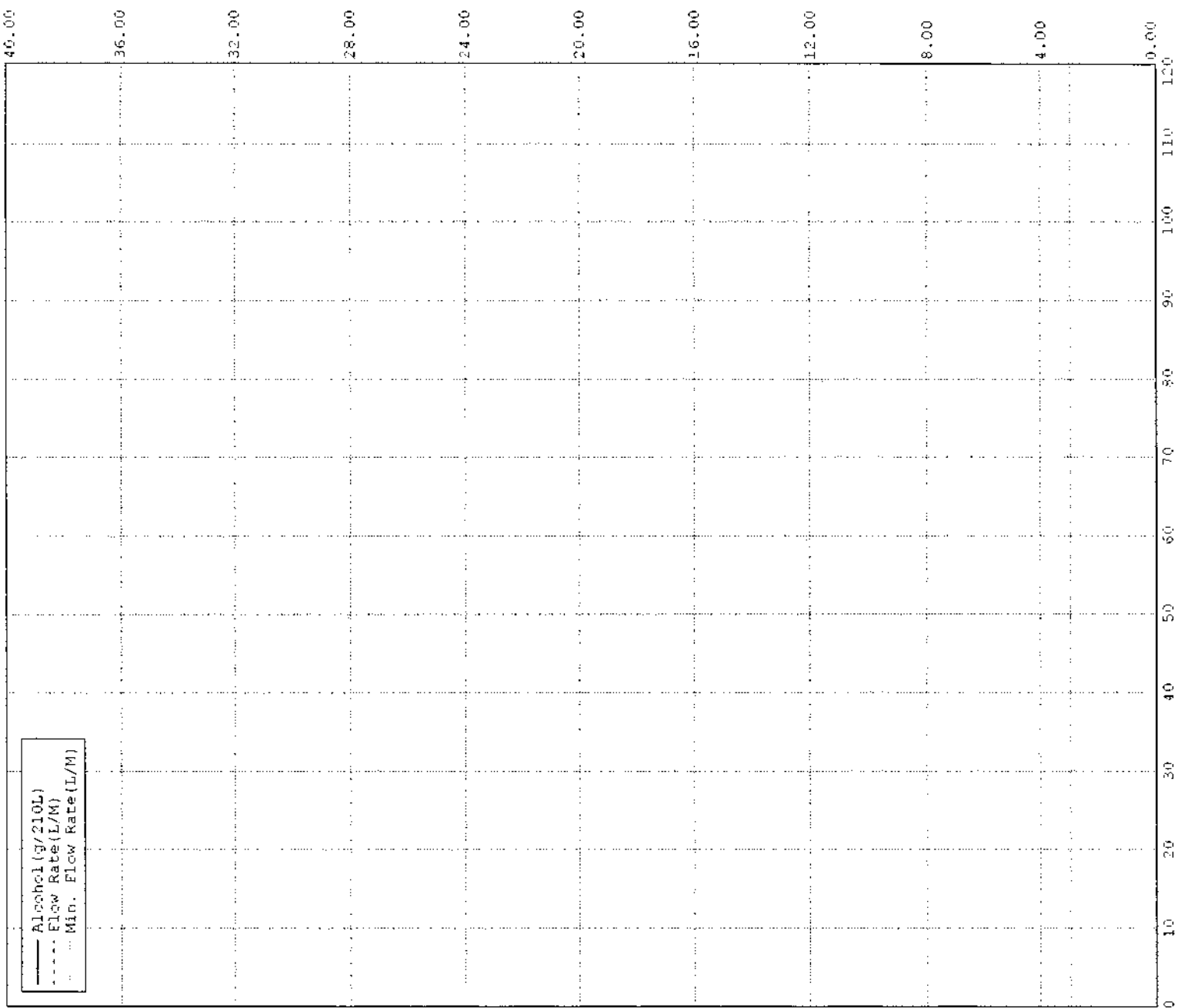
SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

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 30.11: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 07:52  
BLANK TEST 0.000 07:52  
INTERNAL STANDARD VERIFIED 07:52  
EXTERNAL STANDARD 0.081 07:52  
BLANK TEST 0.000 07:53  
SUBJECT SAMPLE INCOMPLETE 07:55



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100670

Date: 07/14/2016

Time: 07:57:20

SUBJECT NAME:

TEST TEST

LICENSE #: INVALID

OPERATOR NAME:

COLLEEN S OBRYANT

OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 16-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 30.11: 0.081

LOT #: AG608504

EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK

BLANK TEST

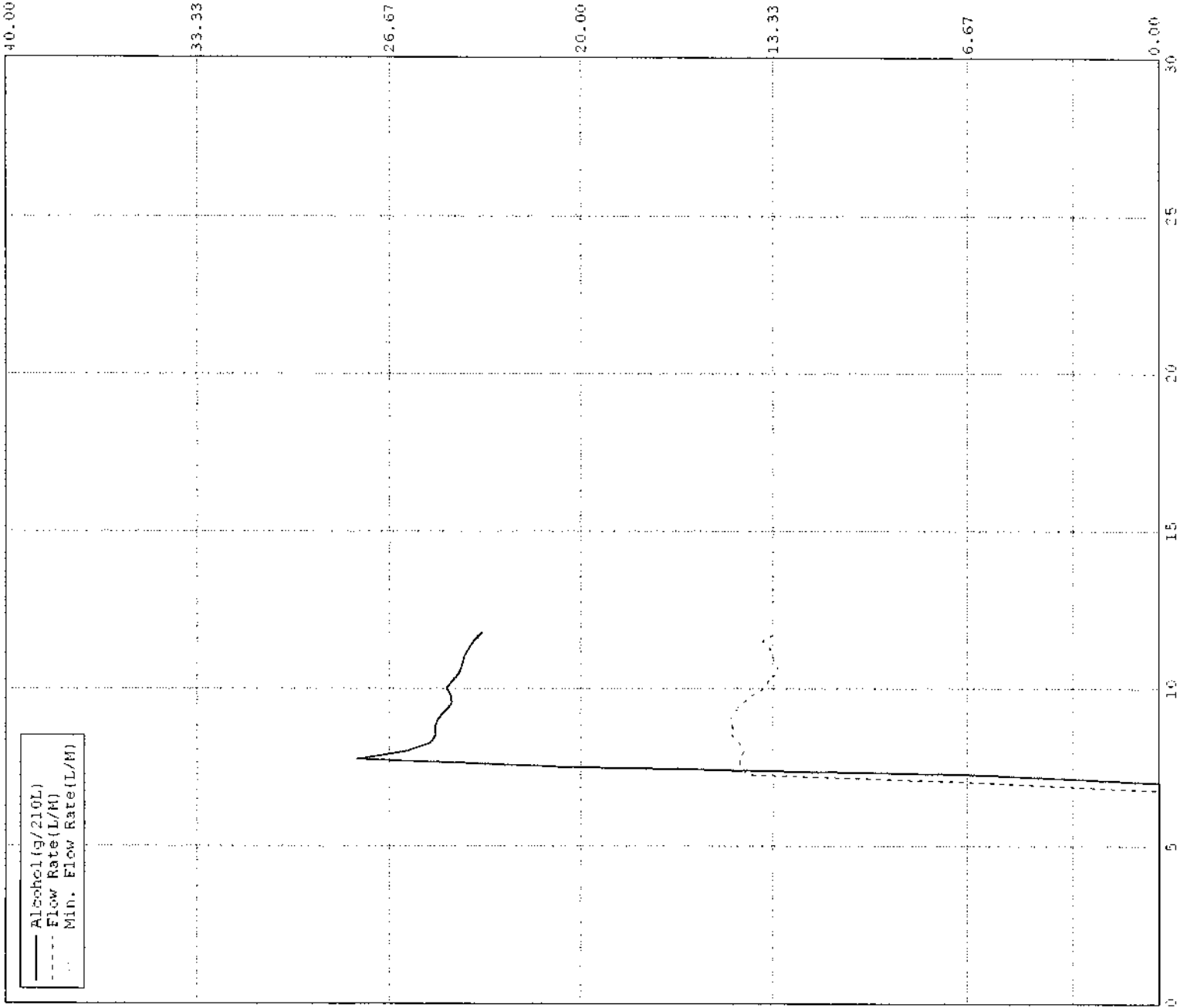
INTERNAL STANDARD

EXTERNAL STANDARD

BLANK TEST

SUBJECT SAMPLE

PASSED 07:58  
0.000 07:58  
VERIFIED 07:58  
0.081 07:58  
0.000 07:59  
INVALID 08:00



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

Date: 07/14/2016  
Time: 08:05:29

SUBJECT NAME:  
TEST TEST  
LICENSE #: ACETONE -INT

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

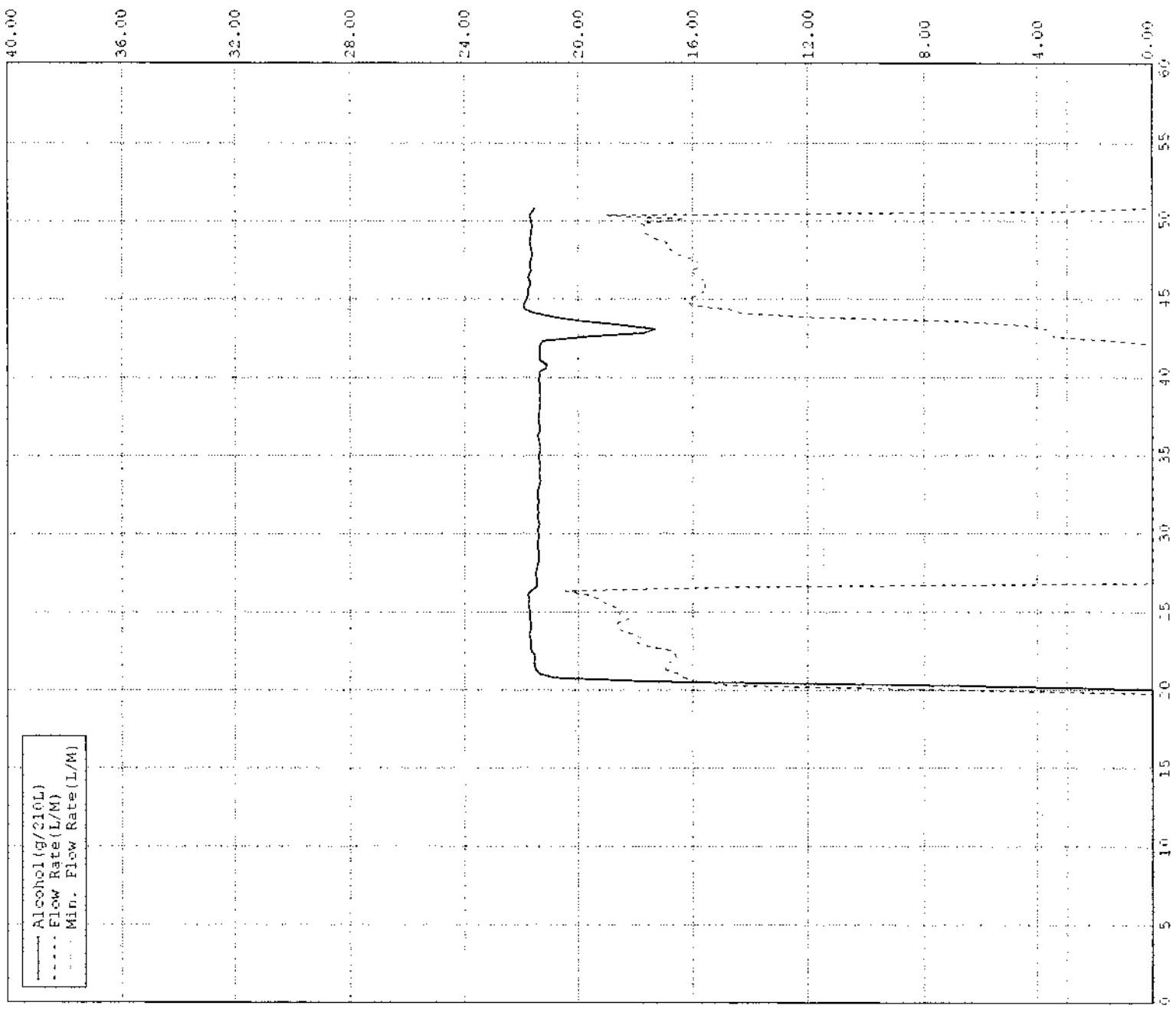
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.11: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:06
BLANK TEST	0.000	08:06
INTERNAL STANDARD	VERIFIED	08:07
Xq = 0.088 (1.18%)		
EXTERNAL STANDARD	0.081	08:07
X[1] = 0.0810 (0.0020) (0.0019)		
BLANK TEST	0.000	08:08
SUBJECT SAMPLE	XXX	08:09
X[1] = 0.1080 (-0.0199) (-0.0001)		

Interference Detected

*COB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

Date: 07/14/2016  
Time: 08:12:48

SUBJECT NAME:  
TEST TEST  
LICENSE #: IPA - INT

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

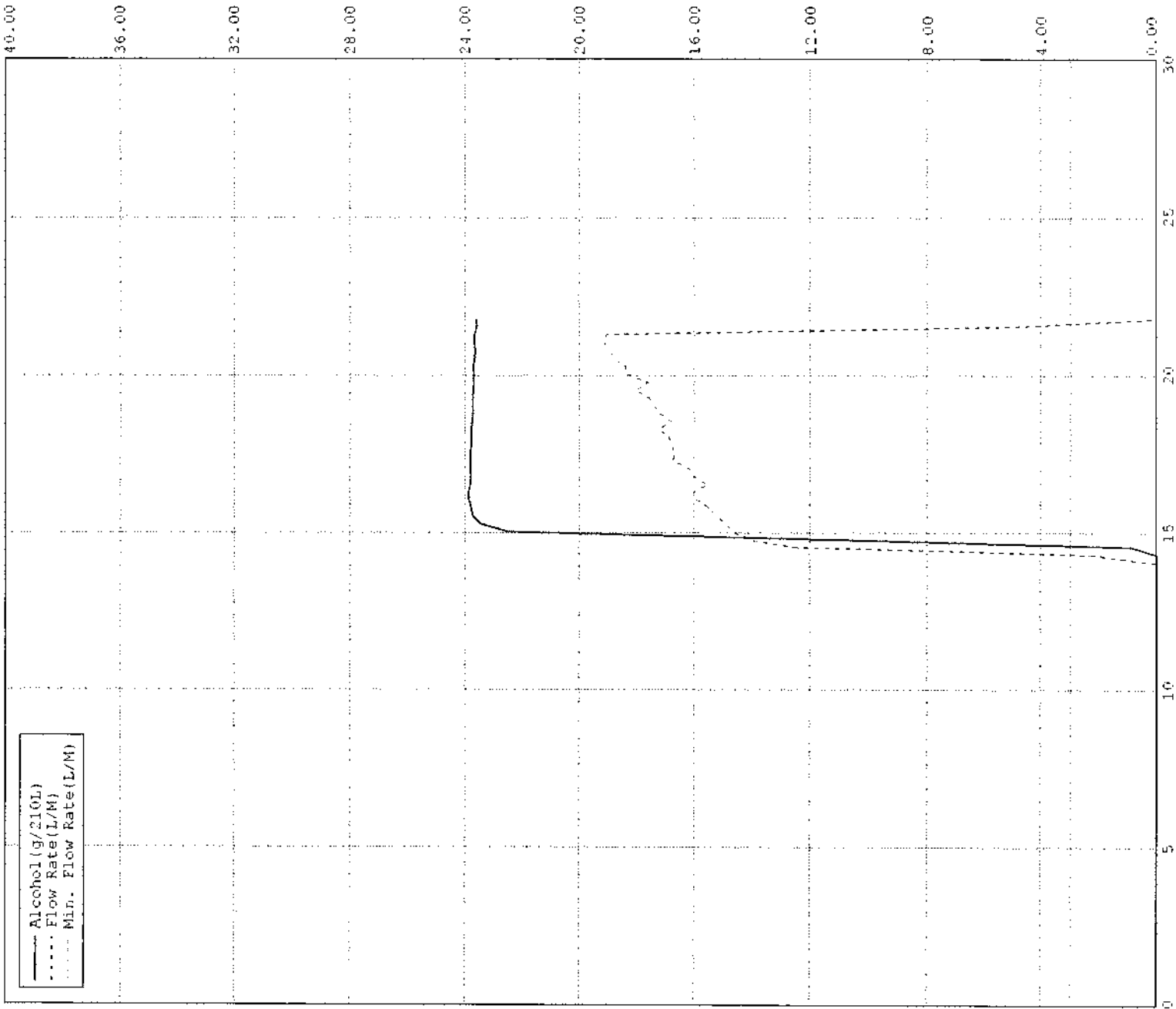
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 30.11: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:14
BLANK TEST	0.000	08:14
INTERNAL STANDARD	VERIFIED	08:14
Xq = 0.087 (1.48%)		
EXTERNAL STANDARD	0.081	08:14
X[1] = 0.0810 (0.0018) (0.0010)		
BLANK TEST	0.000	08:15
SUBJECT SAMPLE	XXX	08:16
X[1] = 0.1180 (-0.0255) (-0.0001)		

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

Date: 07/14/2016  
Time: 08:19:21

SUBJECT NAME:  
TEST TEST  
LICENSE #: NEGATIVE INT

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

DEPT/AGENCY:  
AAA1

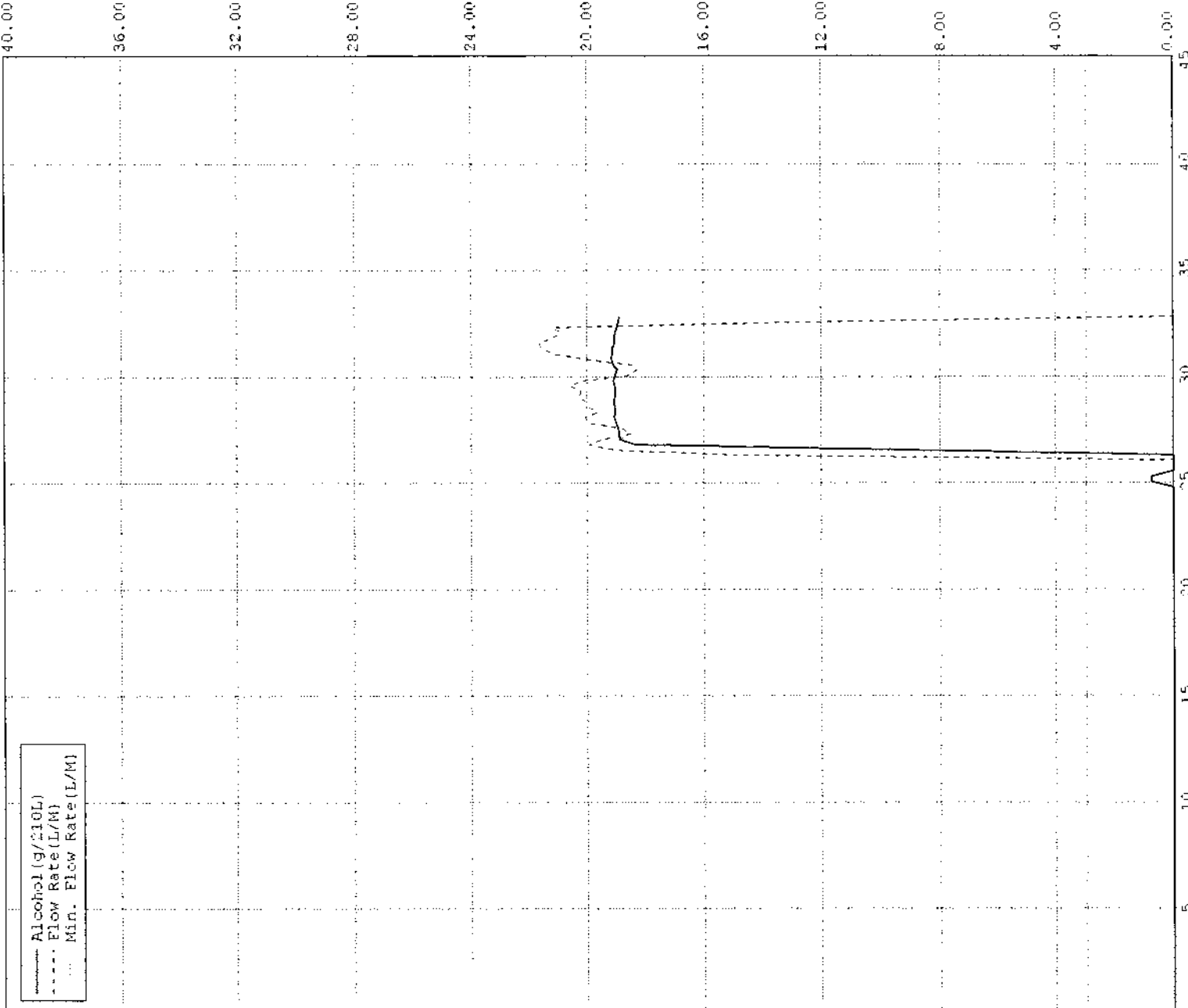
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 30.11: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:20
BLANK TEST	0.000	08:20
INTERNAL STANDARD	VERIFIED	08:20
Xq = 0.087 (1.28%)		
EXTERNAL STANDARD	0.081	08:20
X[1] = 0.0809 (0.0020) (0.0014)		
BLANK TEST	0.000	08:21
SUBJECT SAMPLE (Vol=2.11L)	0.095	08:22
X[1] = 0.0950 (-0.0020) (0.0000)		
BLANK TEST	0.000	08:23
EXTERNAL STANDARD	0.081	08:23
X[1] = 0.0808 (0.0020) (0.0016)		
BLANK TEST	0.000	08:24

*Filter 2 avg = 0.0020*  
*Filter 3 avg = 0.0015*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

Date: 07/14/2016  
Time: 08:28:12

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

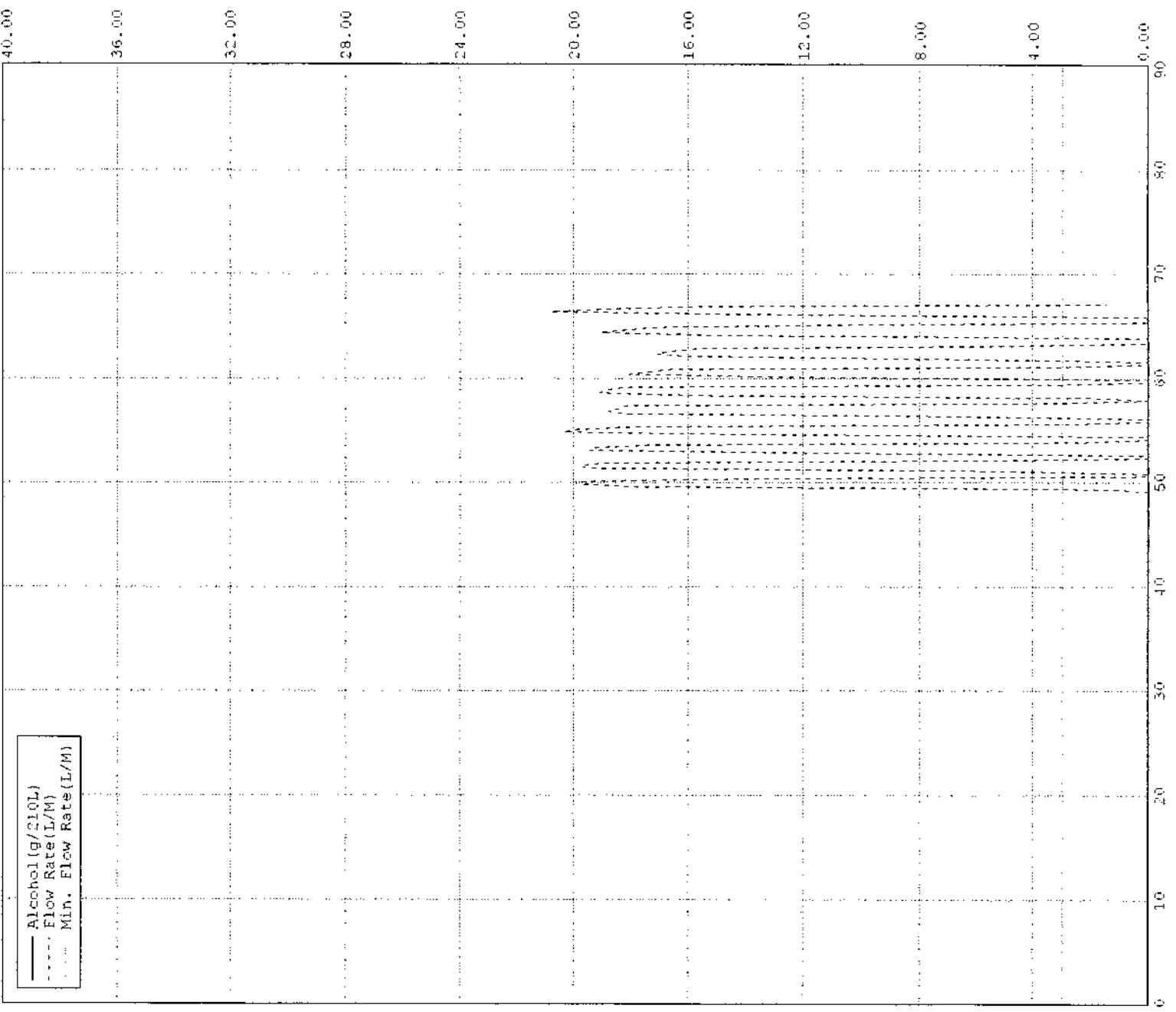
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.11: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 08:29  
BLANK TEST 0.000 08:29  
INTERNAL STANDARD VERIFIED 08:29  
EXTERNAL STANDARD 0.081 08:29  
BLANK TEST 0.000 08:30  
SUBJECT SAMPLE XXX 08:31

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100670

Date: 07/14/2016

Time: 08:34:13

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 30.11: 0.081

LOT #: AG608504

EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK

PASSED 08:35

BLANK TEST

0.000

INTERNAL STANDARD

VERIFIED 08:35

EXTERNAL STANDARD

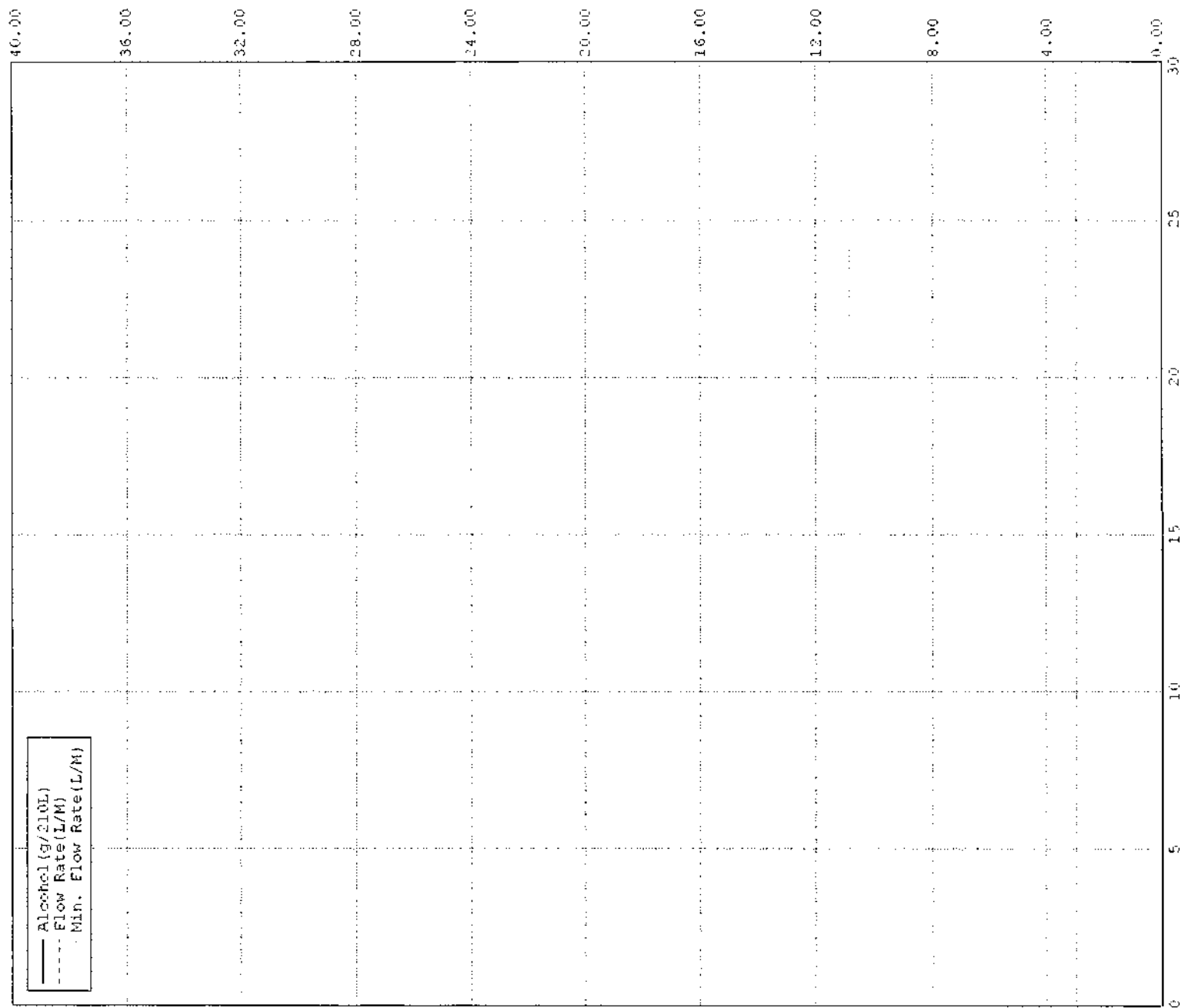
0.081

BLANK TEST

0.000 08:36

RFI DETECTED

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



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

Date: 07/14/2016  
Time: 08:52:05

SUBJECT NAME:  
TEST TEST  
LICENSE #: NON DRINKING

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	08:53
BLANK TEST	0.000	08:53
INTERNAL STANDARD	VERIFIED	08:53
EXTERNAL STANDARD	0.081	08:53
BLANK TEST	0.000	08:54
SUBJECT SAMPLE (Vol=2.17L)	0.000	08:55
BLANK TEST	0.000	08:55
EXTERNAL STANDARD	0.082	08:56
BLANK TEST	0.000	08:57

