

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 100347 Analyst Brandi Barnett Start Date 11/30/16

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 1.6 L (1.3L to 1.7L)
11/30/16

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 Arcgas Lot AG 608504 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 DR6267 Date Calibrated 3/3/16
- vi. 0.300g/210L Mnf Guth Lot 15170 Exp 7/20/17
 - 1. Simulator S/N DR4176 Date Calibrated 3/3/16

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 DR4162 Date Calibrated 3/2/16
- ii. Isopropanol - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17
 - 1. Simulator S/N DR4163 Date Calibrated 3/2/16
- iii. Negative Control - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18
 - 1. Simulator S/N SD1176 Date Calibrated 3/4/16

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 12/1/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 11/30/2016
Time: 08:27:13

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.3°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.38 V PASSED
(1.34 V - 3.12 V)
Cooler Voltage = 1.97 V PASSED
(1.13 V - 2.65 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 548 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.228 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.003 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 = 0.091 1.04% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100347

Date: 11/30/2016

Time: 8:36 AM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 46.1°C

Current Barometer 29.2 in

Volume (Ltr) 1.44

Settings

Lamp: 2.44 V

Bias: 80 V

Cooler: 1.95 V

Chopper: 535 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.058 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/22/2011
Time: 14:26:48

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

LOT #: GUTH100
BOTTLE #: 9380
EXPIRATION: 12/17/2011

Ca	=	0.1000		
CAL	=	0.967916	0.800	<= CAL < 1.200
b1	=	0.0002	0.0000	<= b1 < 0.0040
b2	=	0.0053	0.0010	<= b2 < 0.0100
b3	=	0.0000	0.0000	<= b3 < 0.0040
Xq	=	0.0921	0.0500	<= Xq < 0.2000
a21	=	1.175203	1.050	<= a21 < 1.300
a31	=	0.445516	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 11/30/2016
Time: 08:47:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

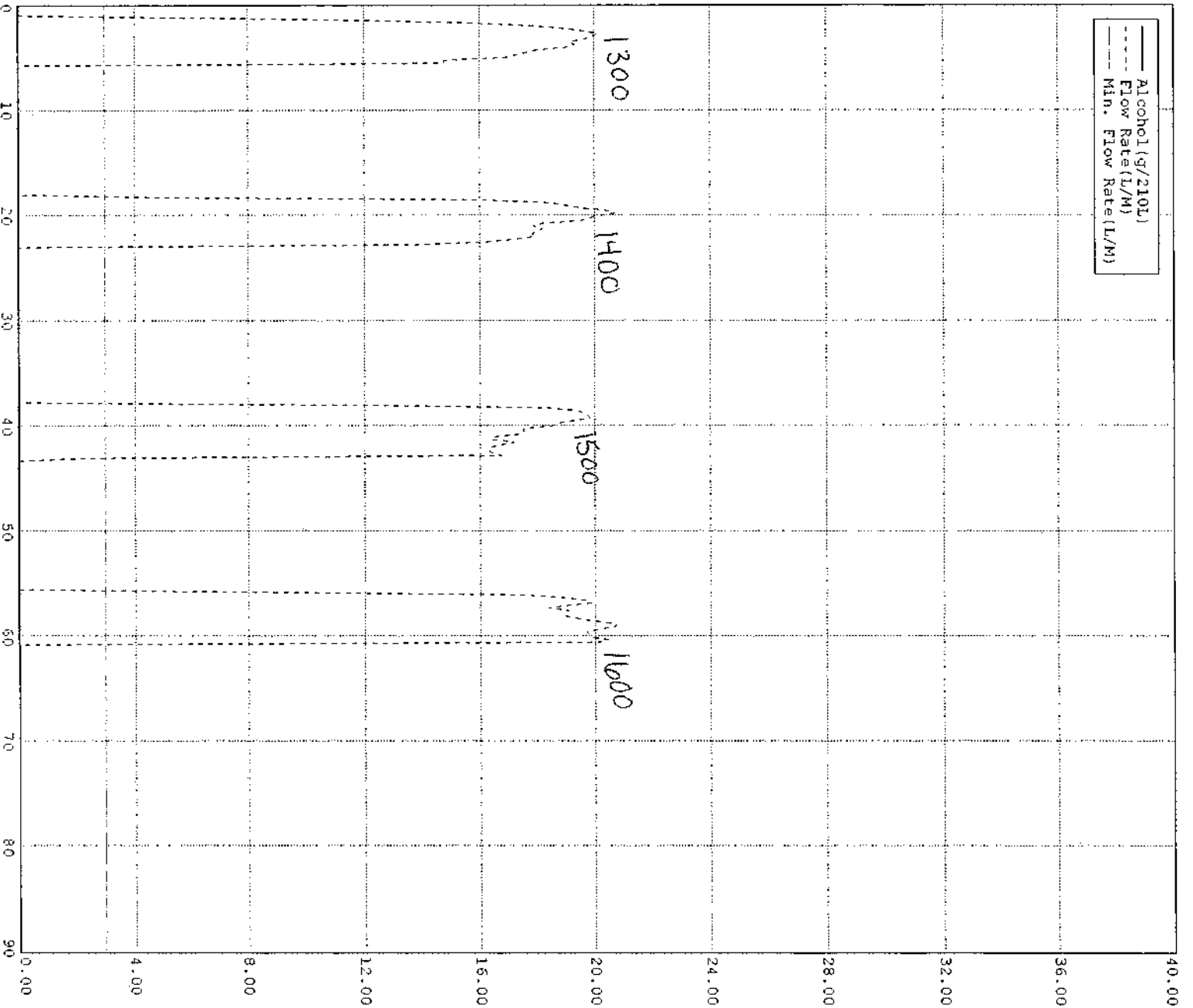
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.21: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:48
BLANK TEST	0.000	08:48
INTERNAL STANDARD	VERIFIED	08:48
EXTERNAL STANDARD	0.077	08:49
BLANK TEST	0.000	08:49
SUBJECT SAMPLE (Vol=1.58L)	0.000	08:51
BLANK TEST	0.000	08:51
EXTERNAL STANDARD	0.076	08:52
BLANK TEST	0.000	08:53

BMB



LINEARITY CHECK

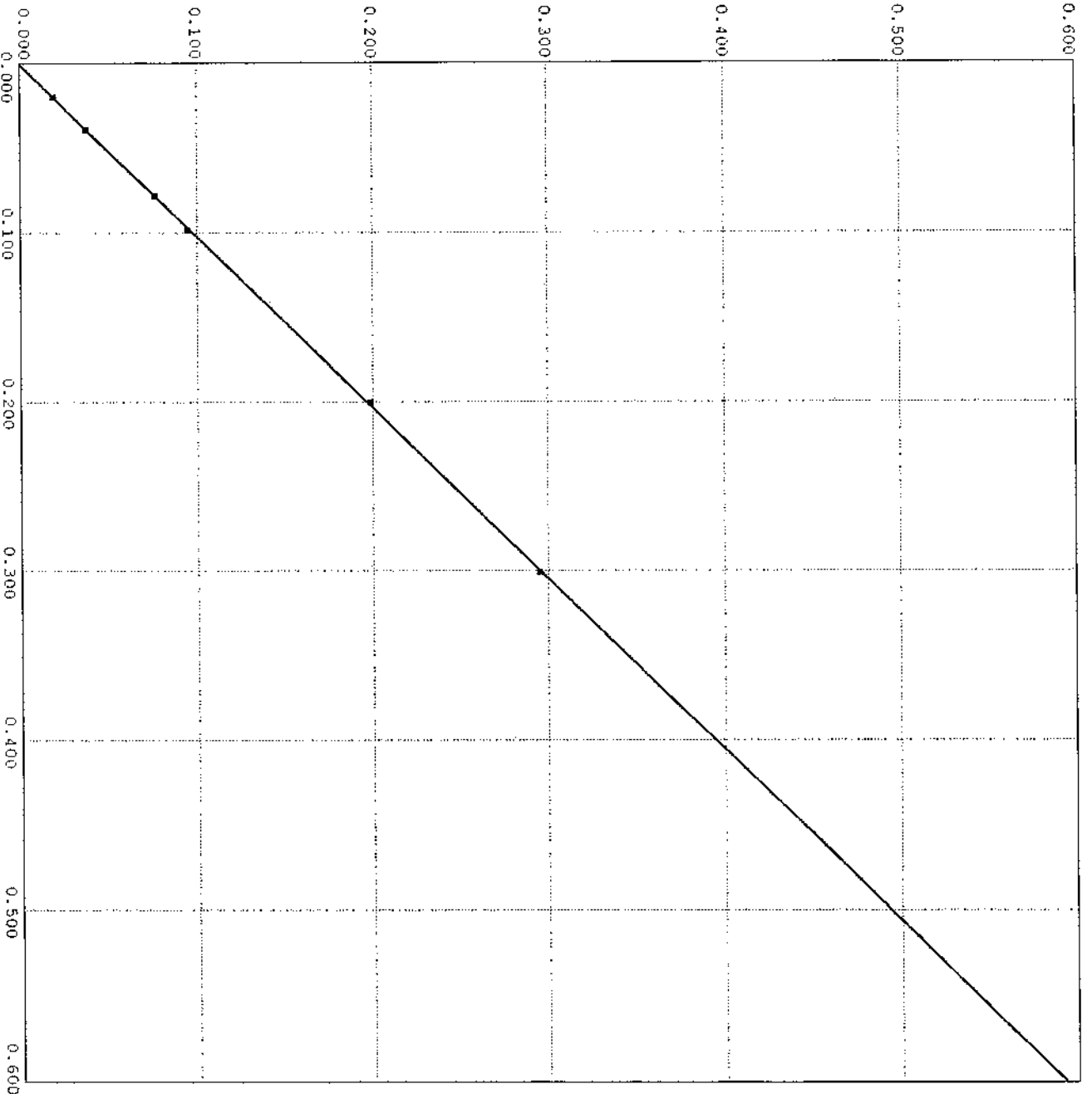
Alaska Department of Public Safety
DATA MASTER dmt: 100347

Date: 11/30/2016
Time: 09:45:40

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.039	0.0384	0.0005
0.078	0.0770	0.0000
0.098	0.0956	0.0005
0.200	0.1996	0.0005
0.300	0.2958	0.0004

SLOPE = 0.989533
R² = 0.999898



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100347

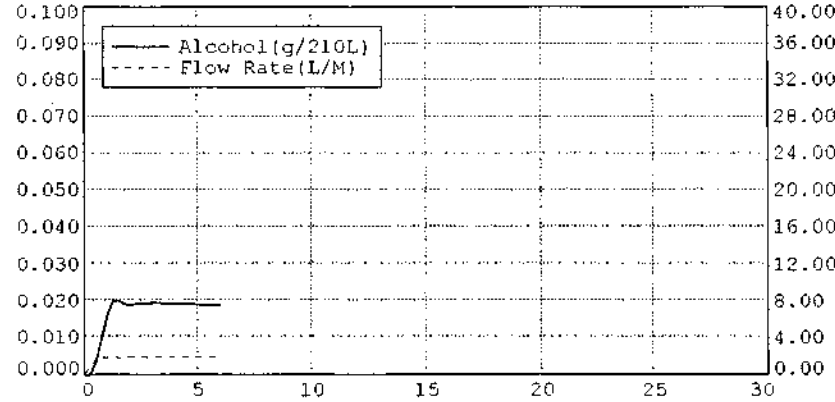
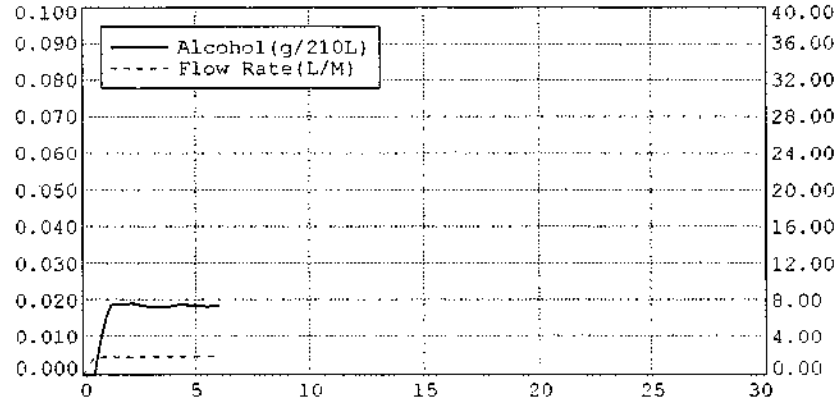
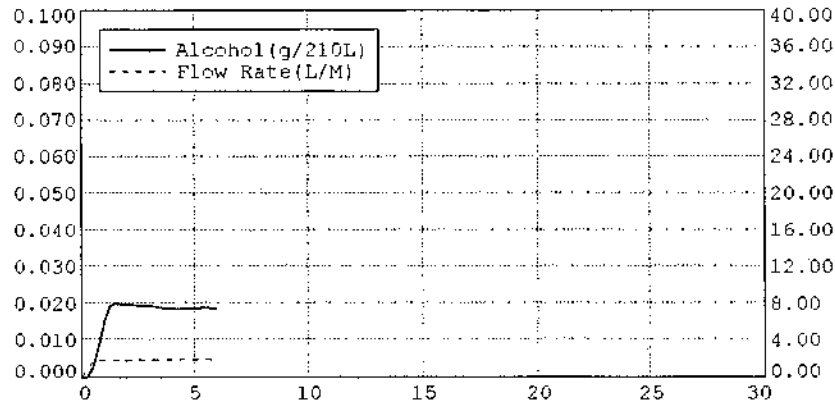
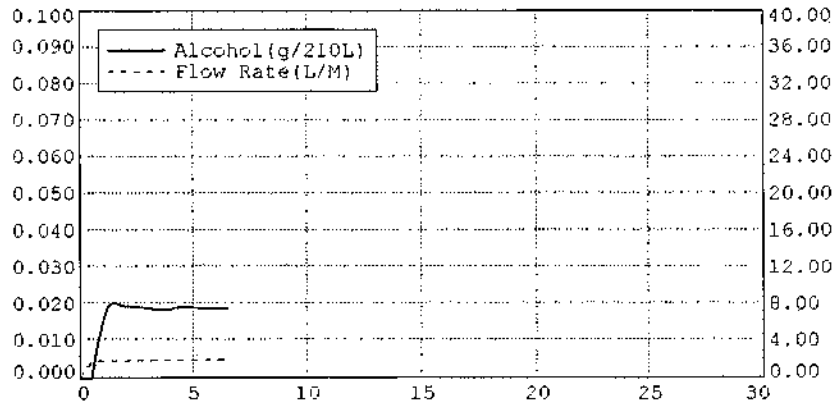
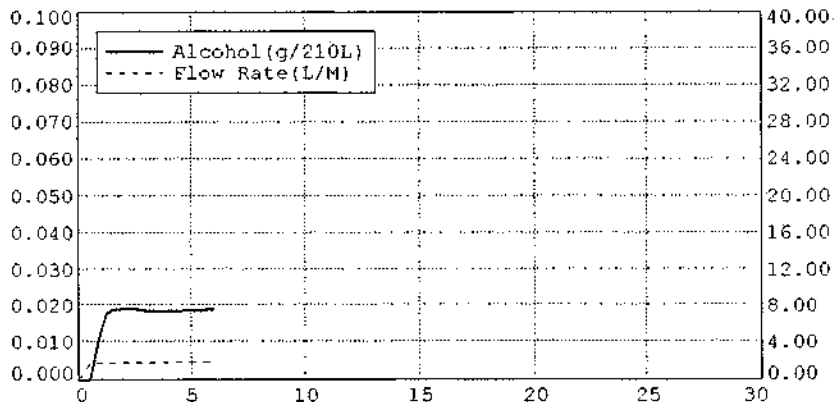
Date: 11/30/2016
 Time: 09:45:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.21: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 298 psi

BLANK TEST	0.000	09:47
INTERNAL STANDARD	VERIFIED	09:47
EXTERNAL STANDARD	0.020	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.020	09:48
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.020	09:49
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.019	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.020	09:51
BLANK TEST	0.000	09:52

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dnt: 100347

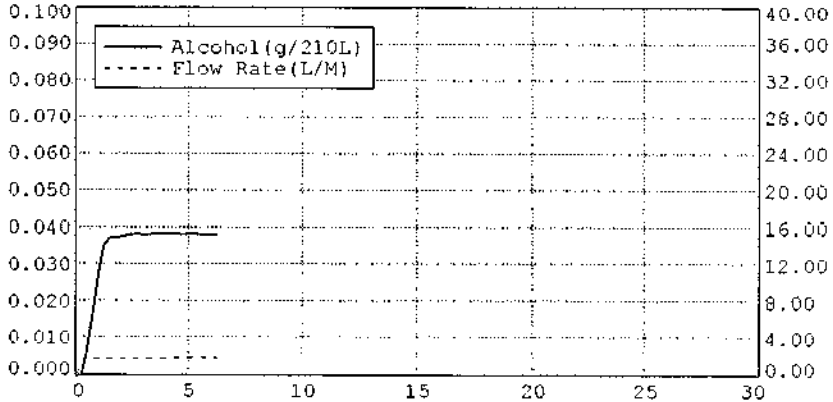
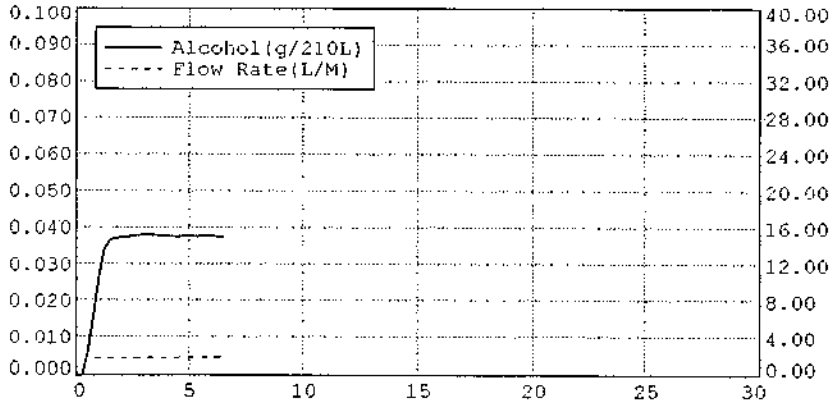
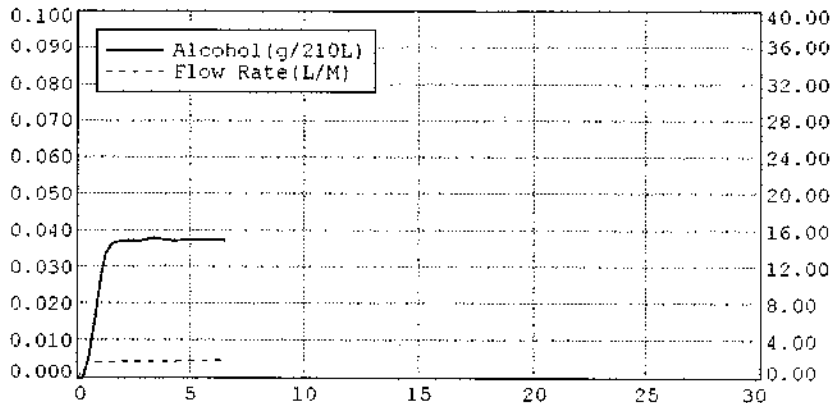
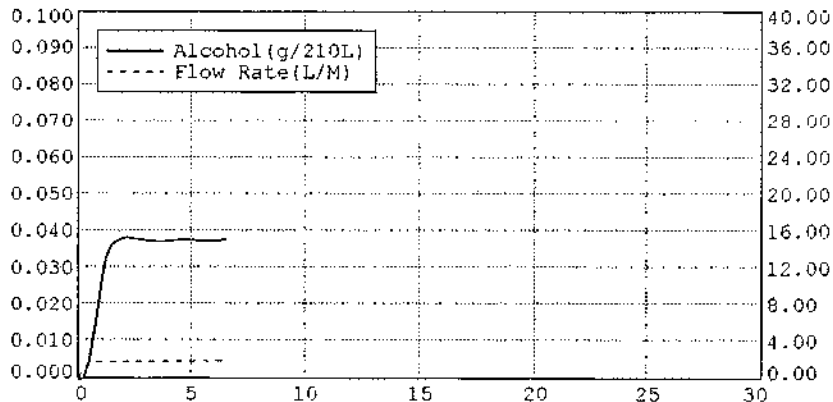
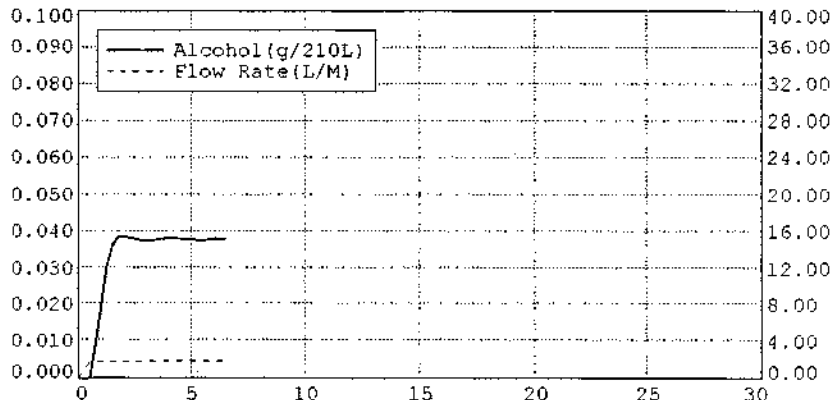
Date: 11/30/2016
 Time: 09:55:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.22: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 168 psi

BLANK TEST	0.000	09:56
INTERNAL STANDARD	VERIFIED	09:56
EXTERNAL STANDARD	0.039	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.038	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.038	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.038	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.039	10:00
BLANK TEST	0.000	10:01

Average = 0.0384
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100347

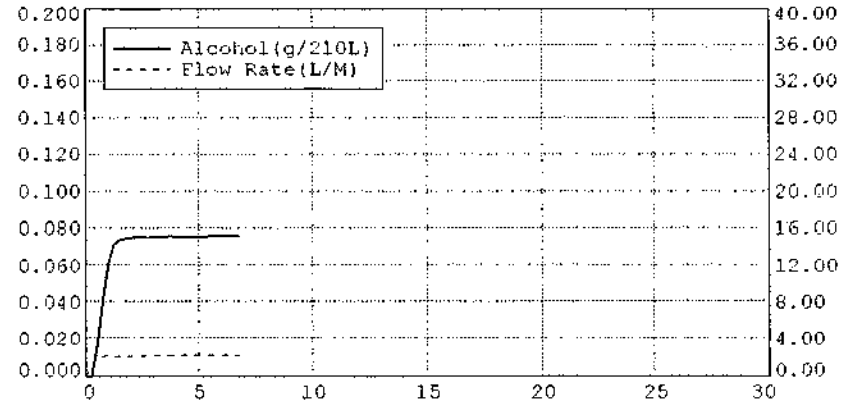
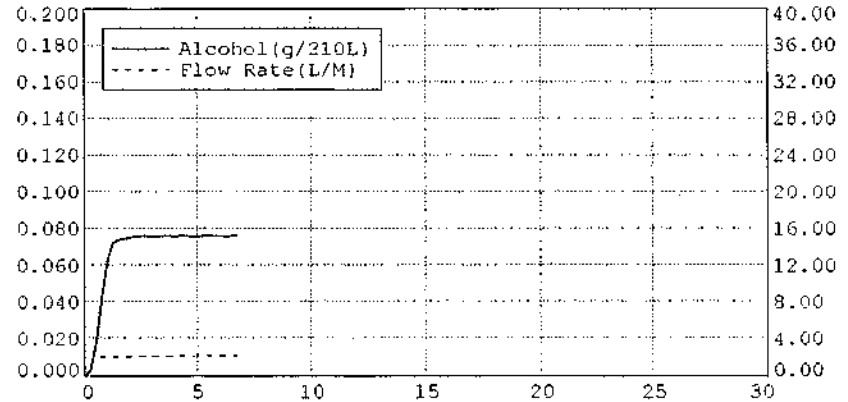
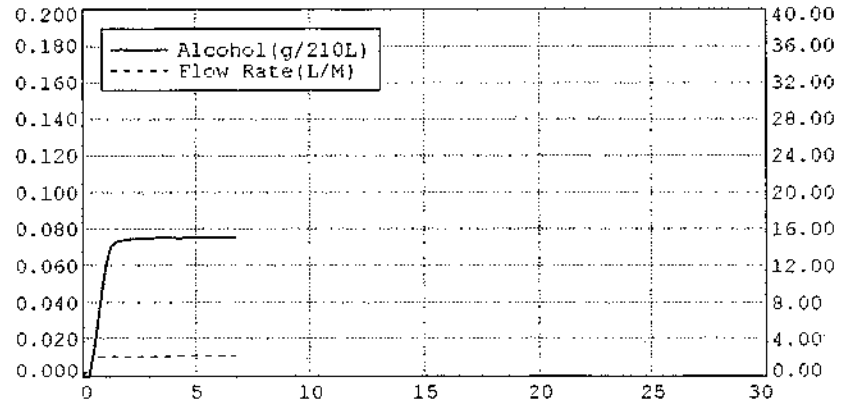
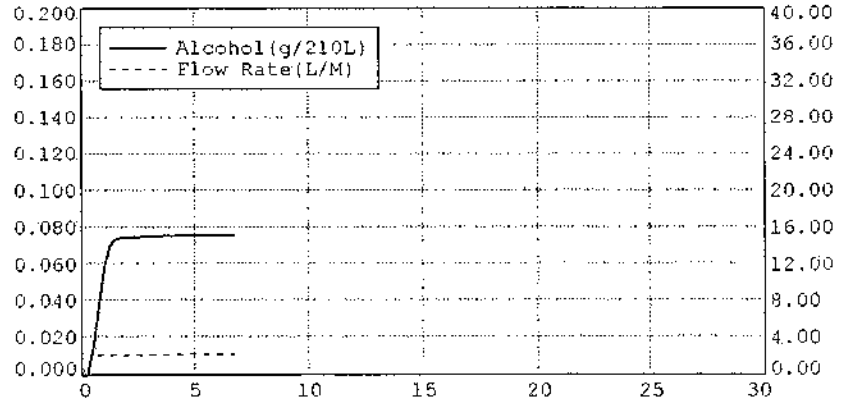
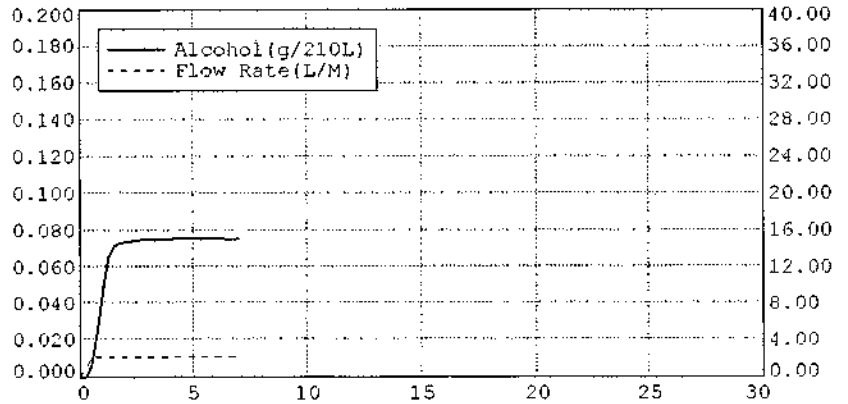
Date: 11/30/2016
 Time: 10:04:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.22: 0.078
 LOT #: AG608504
 EXPIRATION: 03/25/2018
 TANK PRESSURE: 607 psi

BLANK TEST	0.000	10:05
INTERNAL STANDARD	VERIFIED	10:05
EXTERNAL STANDARD	0.077	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.077	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.077	10:08
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.077	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.077	10:10
BLANK TEST	0.000	10:11

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100347

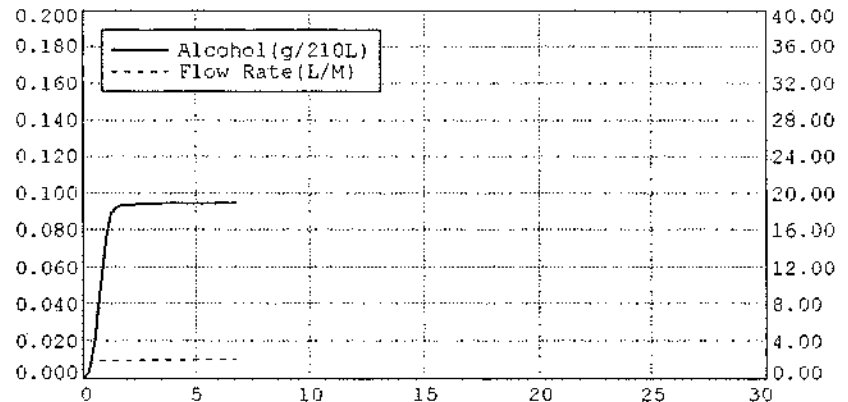
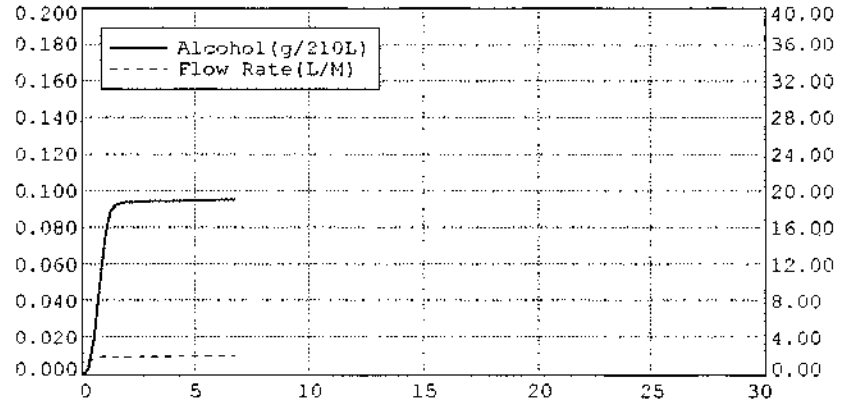
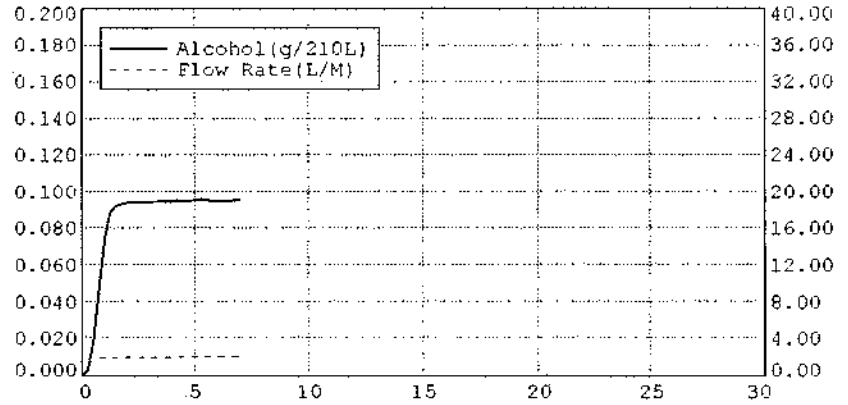
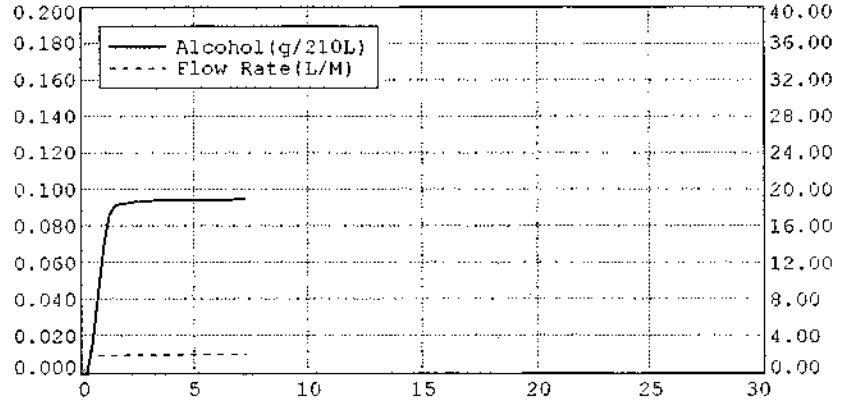
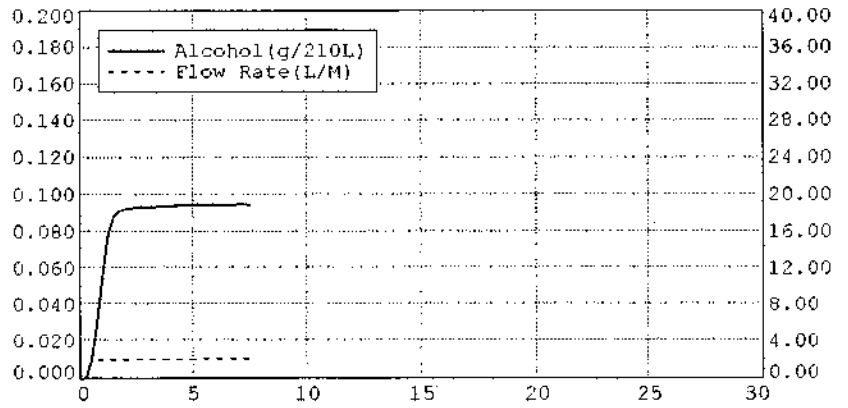
Date: 11/30/2016
 Time: 10:23:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.22: 0.098
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 346 psi

BLANK TEST	0.000	10:24
INTERNAL STANDARD	VERIFIED	10:24
EXTERNAL STANDARD	0.095	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.095	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.096	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.096	10:28
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.096	10:29
BLANK TEST	0.000	10:30

Average = 0.0956
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

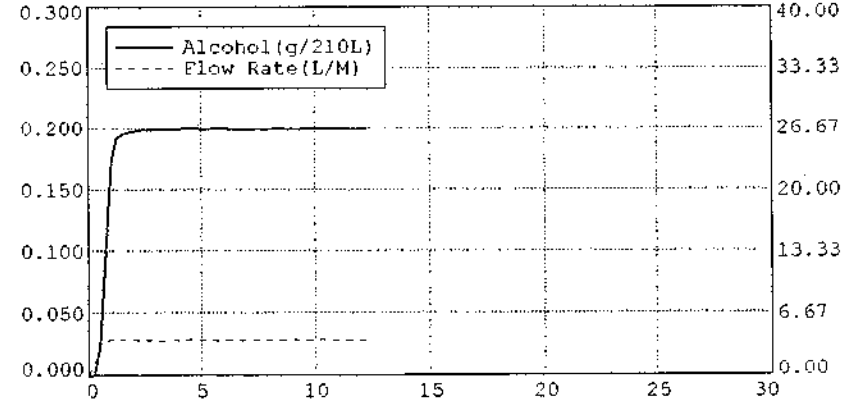
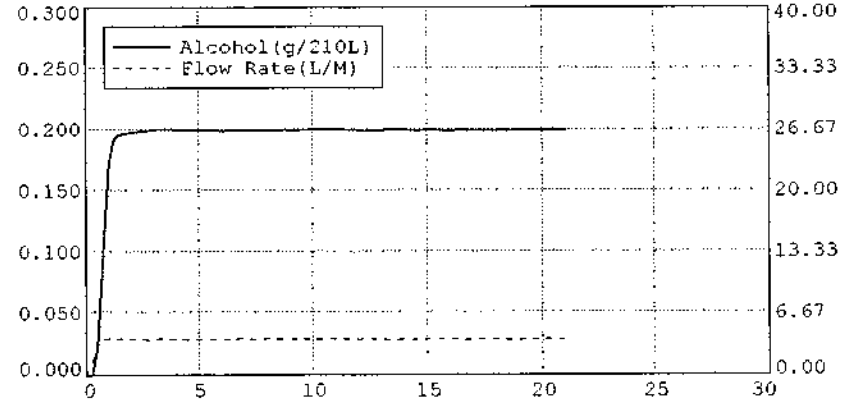
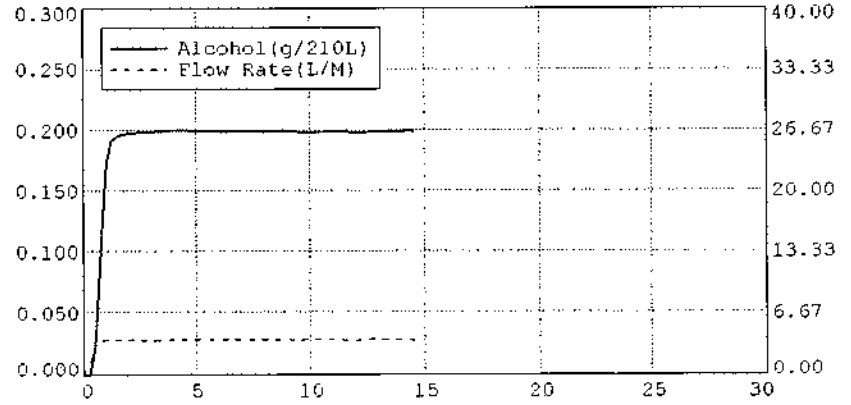
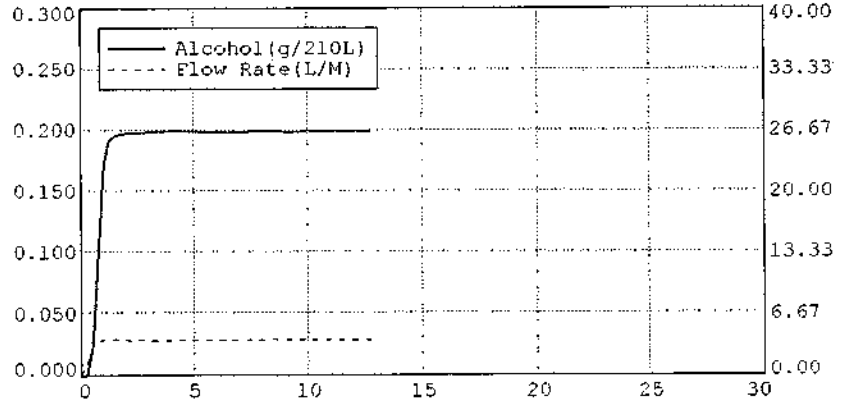
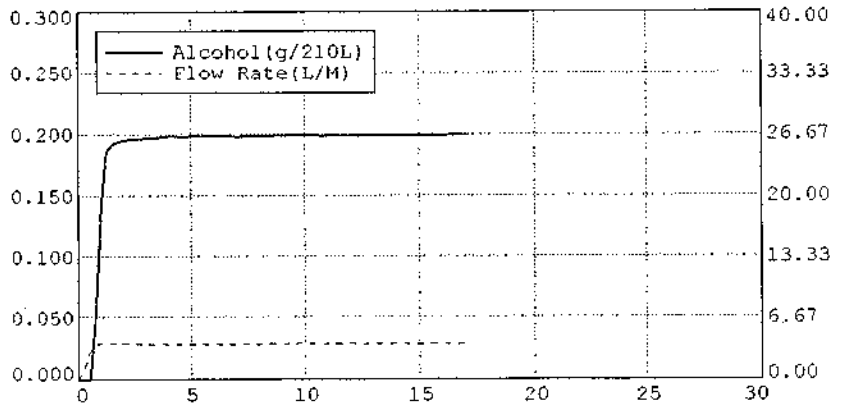
Alaska Department of Public Safety
 DATAMASTER dmt: 100347

Date: 11/30/2016
 Time: 10:38:40

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

BLANK TEST	0.000	10:40
INTERNAL STANDARD	VERIFIED	10:40
EXTERNAL STANDARD	0.200	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.199	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.200	10:43
BLANK TEST	0.000	10:44
EXTERNAL STANDARD	0.199	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.200	10:46
BLANK TEST	0.000	10:47

Average = 0.1996
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

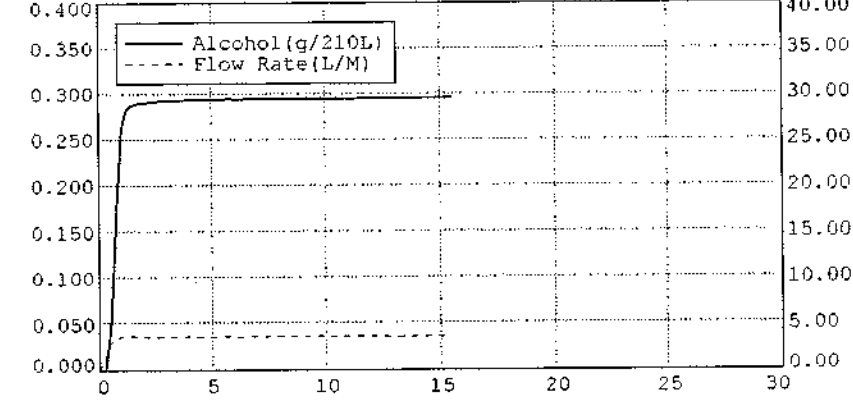
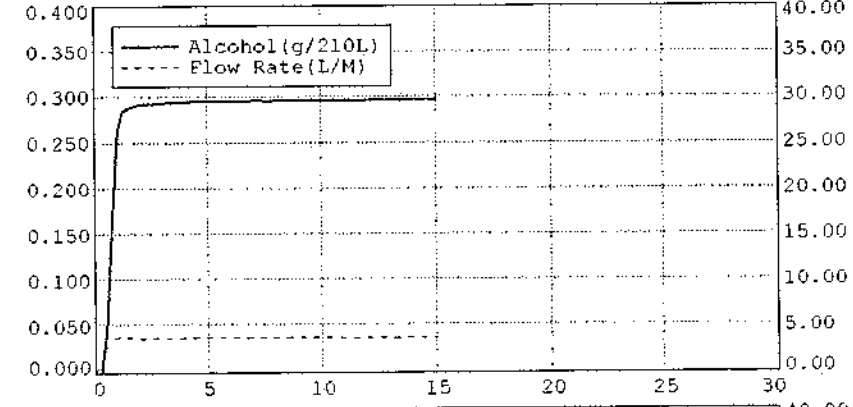
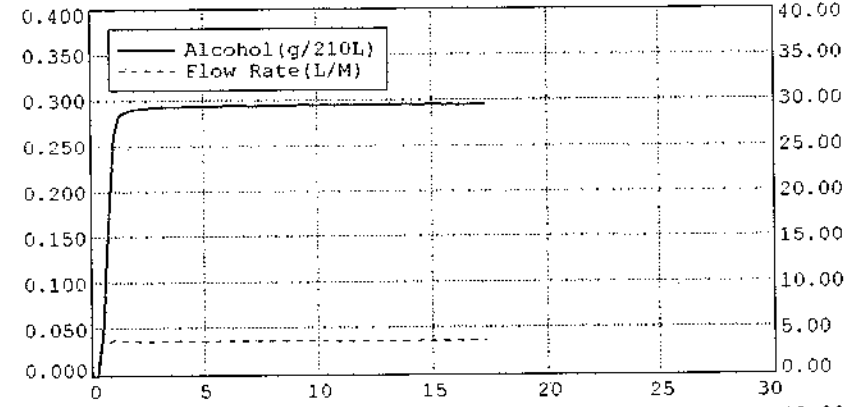
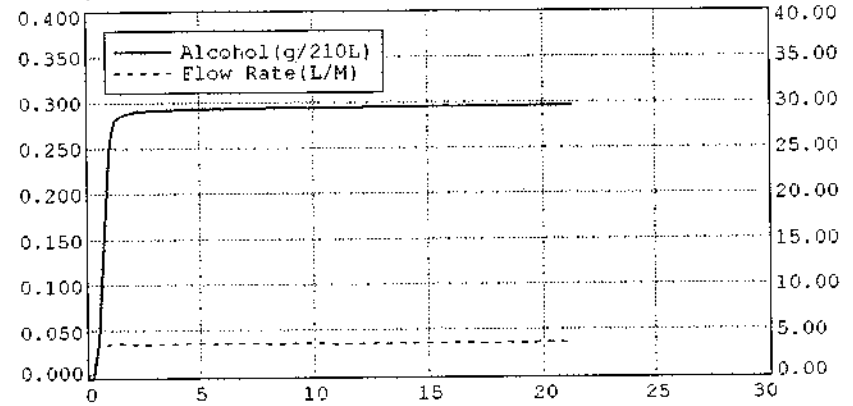
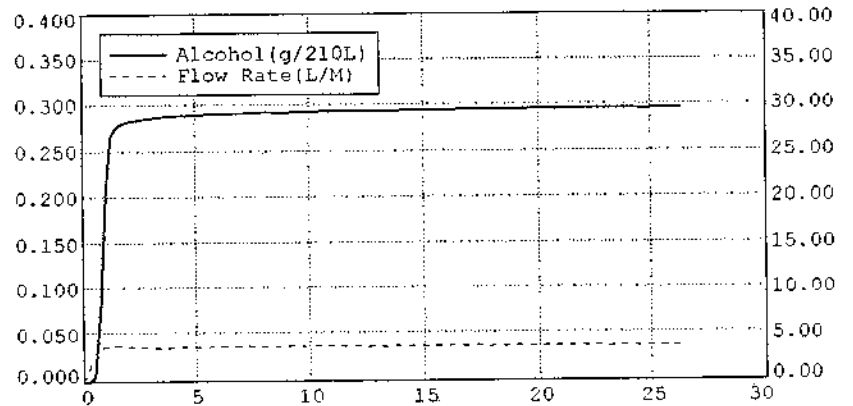
Alaska Department of Public Safety
 DATAMASTER dmt: 100347

Date: 11/30/2016
 Time: 13:00:13

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: GUTH 15170
 EXPIRATION: 07/20/2017

BLANK TEST	0.000	13:01
INTERNAL STANDARD	VERIFIED	13:01
EXTERNAL STANDARD	0.296	13:02
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.296	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.295	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.296	13:06
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.296	13:07
BLANK TEST	0.000	13:08

Average = 0.2958
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dnt: 100347

Date: 11/30/2016
Time: 13:45:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

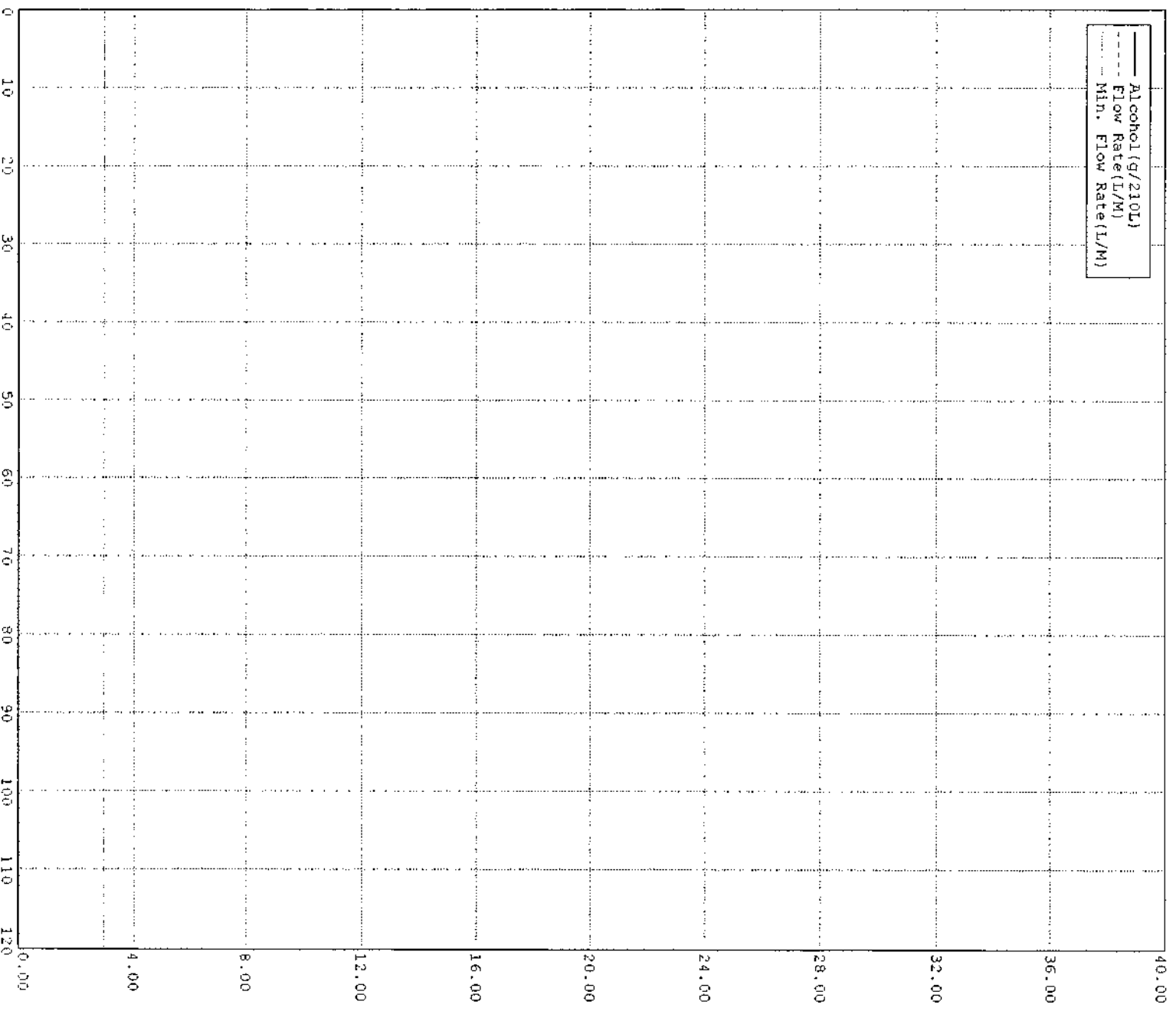
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.13: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:48
BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.076	13:49
BLANK TEST	0.000	13:50
SUBJECT SAMPLE	INCOMPLETE	13:52

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SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100347

Date: 11/30/2016
Time: 13:54:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

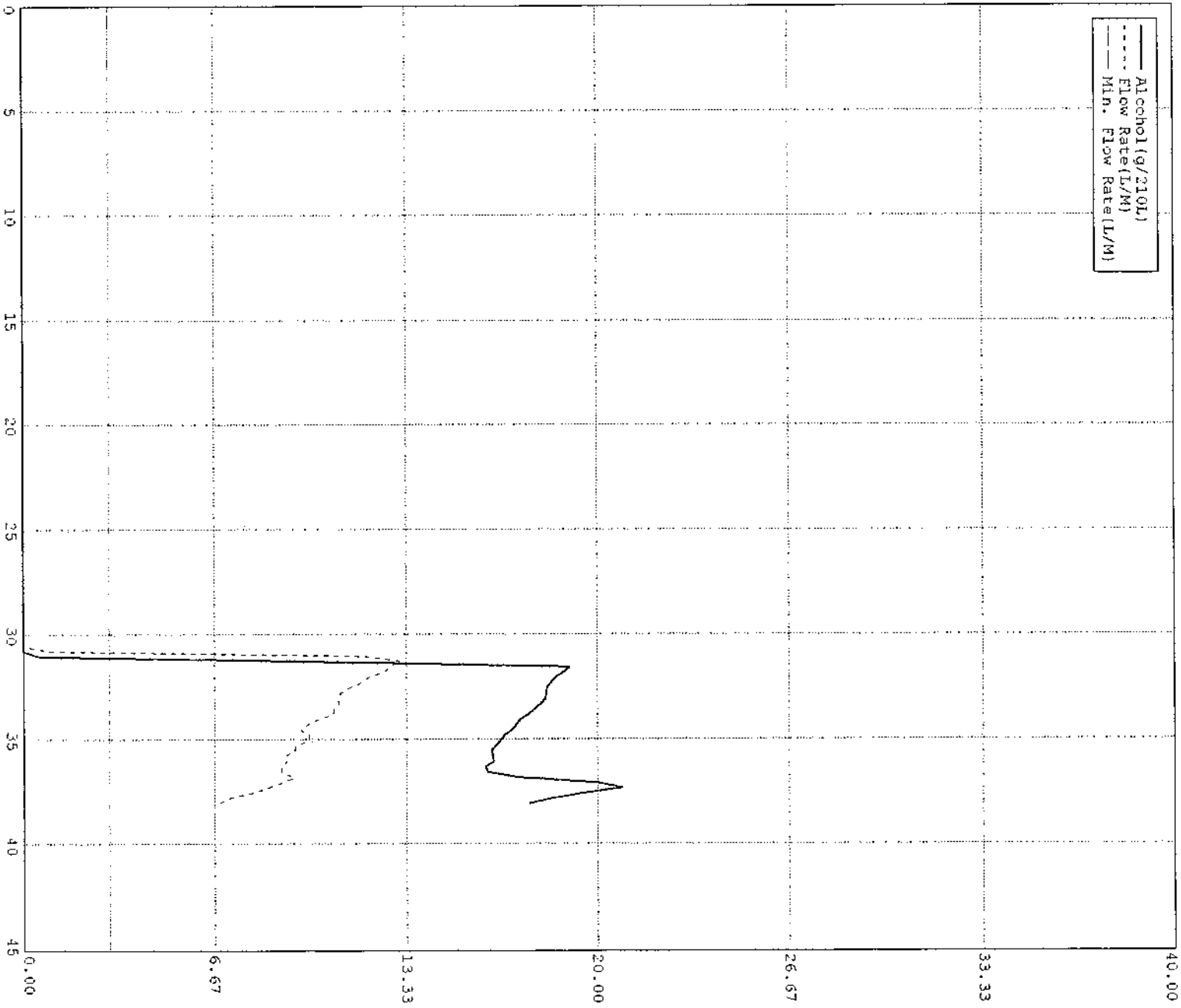
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INVALID
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:56
BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:56
EXTERNAL STANDARD	0.076	13:56
BLANK TEST	0.000	13:57
SUBJECT SAMPLE	INVALID	13:58

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 12/01/2016
Time: 08:53:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INTERERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:54
BLANK TEST	0.000	08:54
INTERVAL STANDARD	VERIFIED	08:54
Xq = 0.091 (0.858)		
EXTERNAL STANDARD	0.076	08:54
X[1] = 0.0758 (-0.0016)	(0.0017)	
BLANK TEST	0.000	08:55
SUBJECT SAMPLE	XXX	08:56
X[1] = 0.1090 (-0.0171)	(-0.0010)	

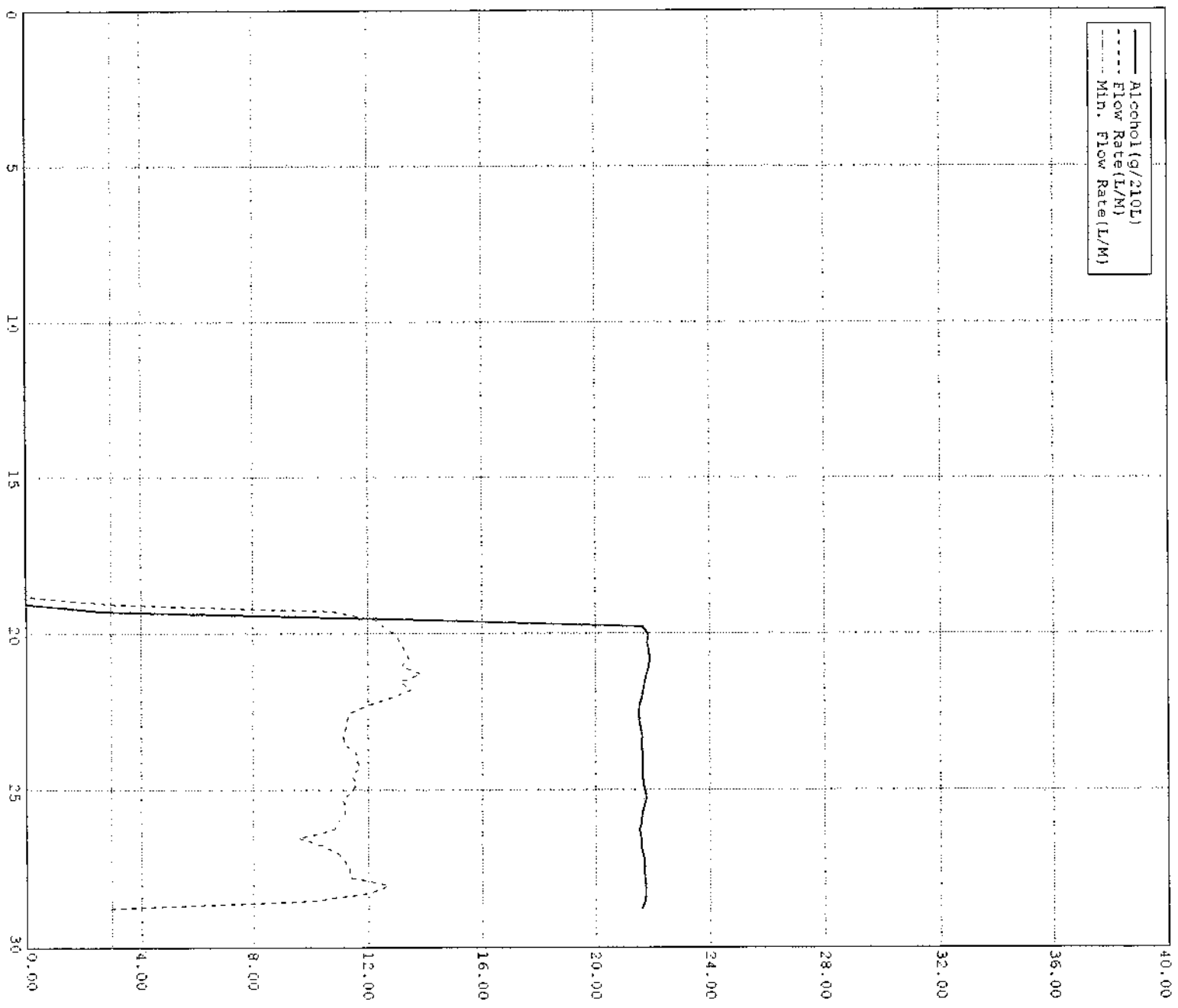
Interference Detected

Filter 2 Avg: -0.0018

Filter 3 Avg: 0.0018

BMB 12/1/16
BMB 12/1/16

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 12/01/2016
Time: 08:58:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

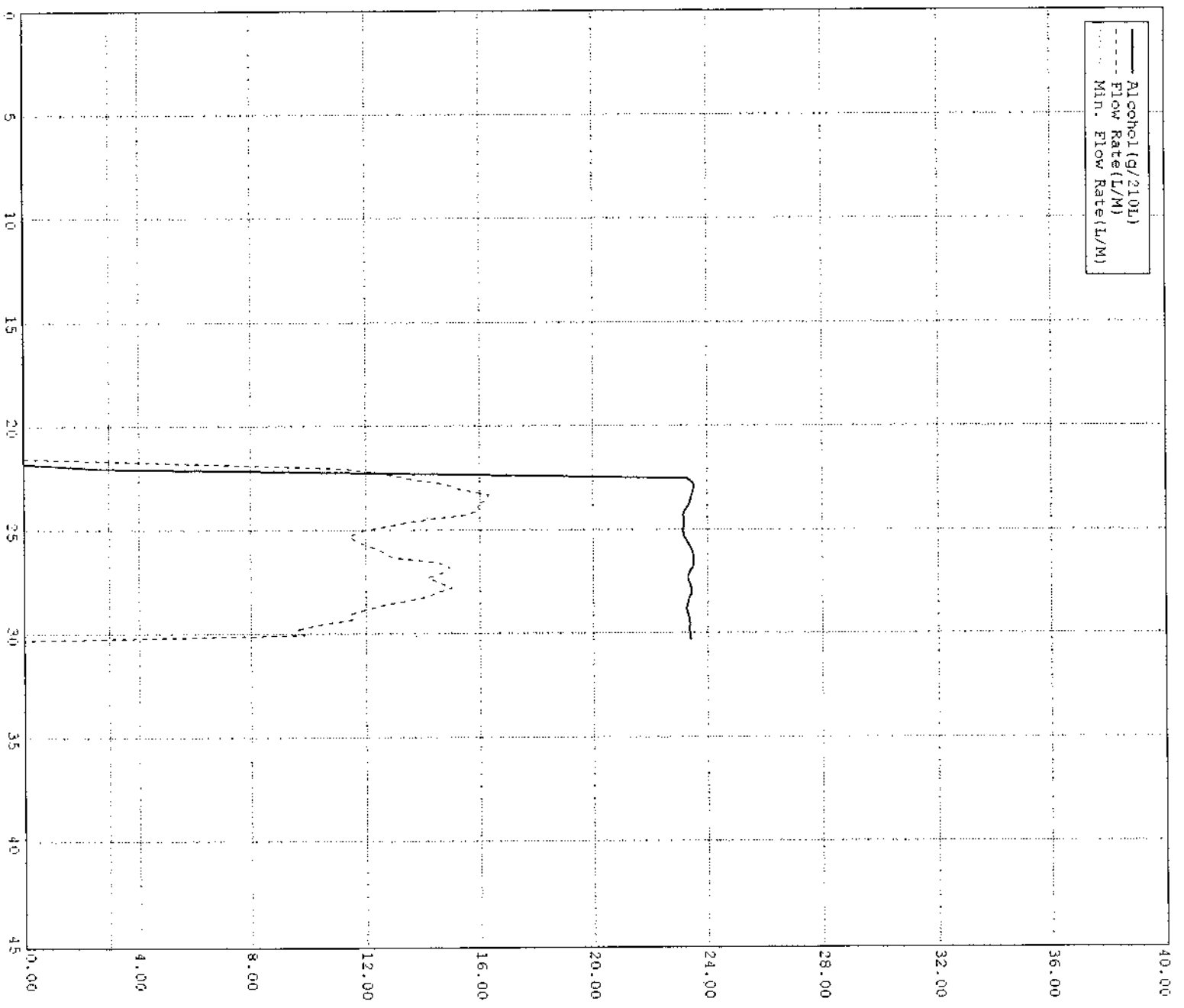
DEPT/AGENCY:
INTERERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:59
BLANK TEST	0.000	08:59
INTERNAL STANDARD	VERIFIED	08:59
Xg = 0.090 (1.99%)		
EXTERNAL STANDARD	0.076	08:59
X[1] = 0.0757 (-0.0022)	{0.0016}	
BLANK TEST	0.000	09:00
SUBJECT SAMPLE	XXX	09:01
X[1] = 0.1174 (-0.0252)	{0.0003}	

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 12/01/2016
Time: 09:14:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

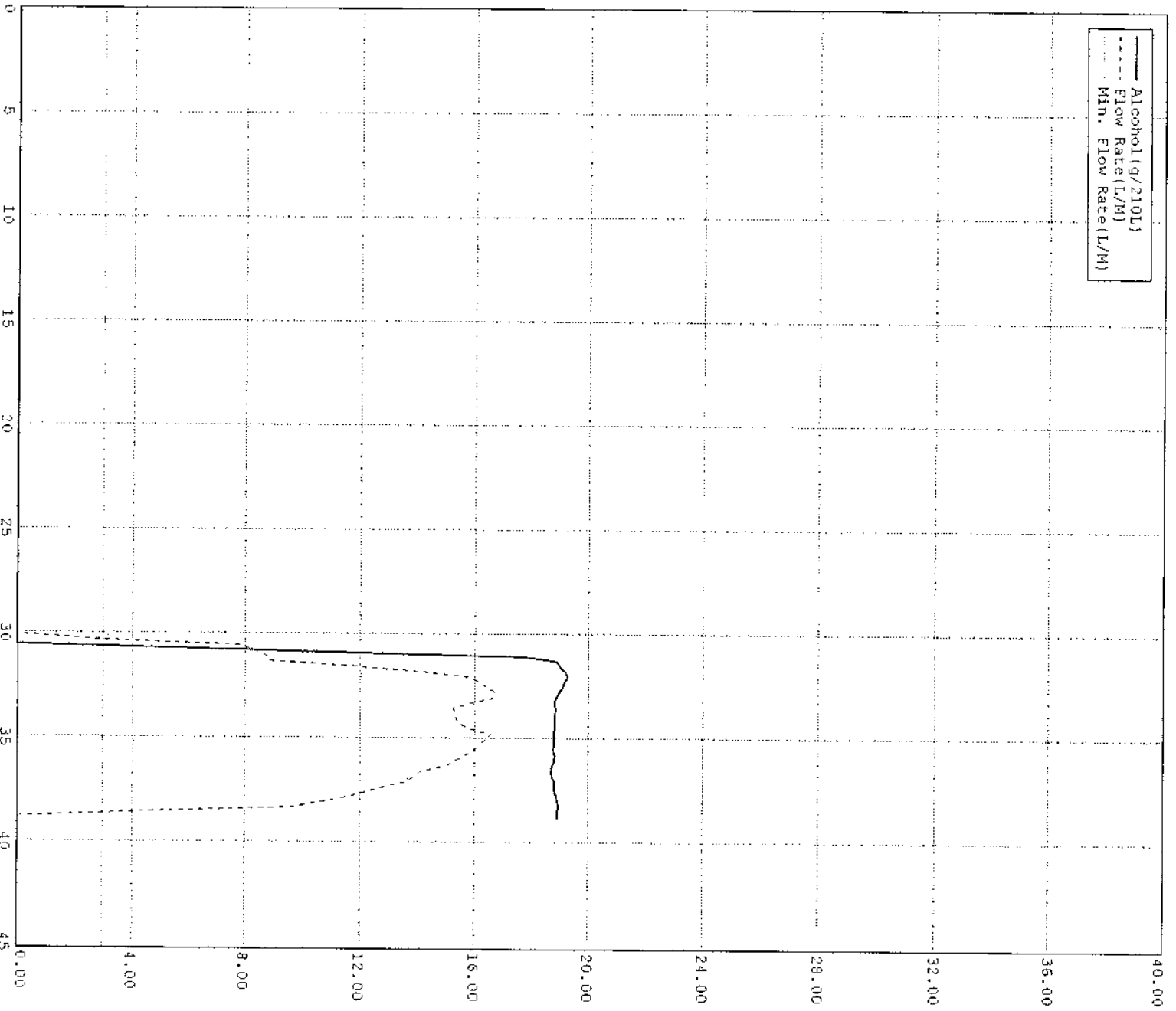
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	09:18
BLANK TEST	0.000	09:18
INTERNAL STANDARD	VERIFIED	09:18
Xq = 0.091 (1.528)		
EXTERNAL STANDARD	0.076	09:19
X[1] = 0.0759 (-0.0021)	(0.0021)	
BLANK TEST	0.000	09:20
SUBJECT SAMPLE (Vol=1.88L)	0.095	09:20
X[1] = 0.0954 (-0.0009)	(-0.0006)	
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.076	09:22
X[1] = 0.0758 (-0.0011)	(0.0017)	
BLANK TEST	0.000	09:22

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 11/30/2016
Time: 14:36:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

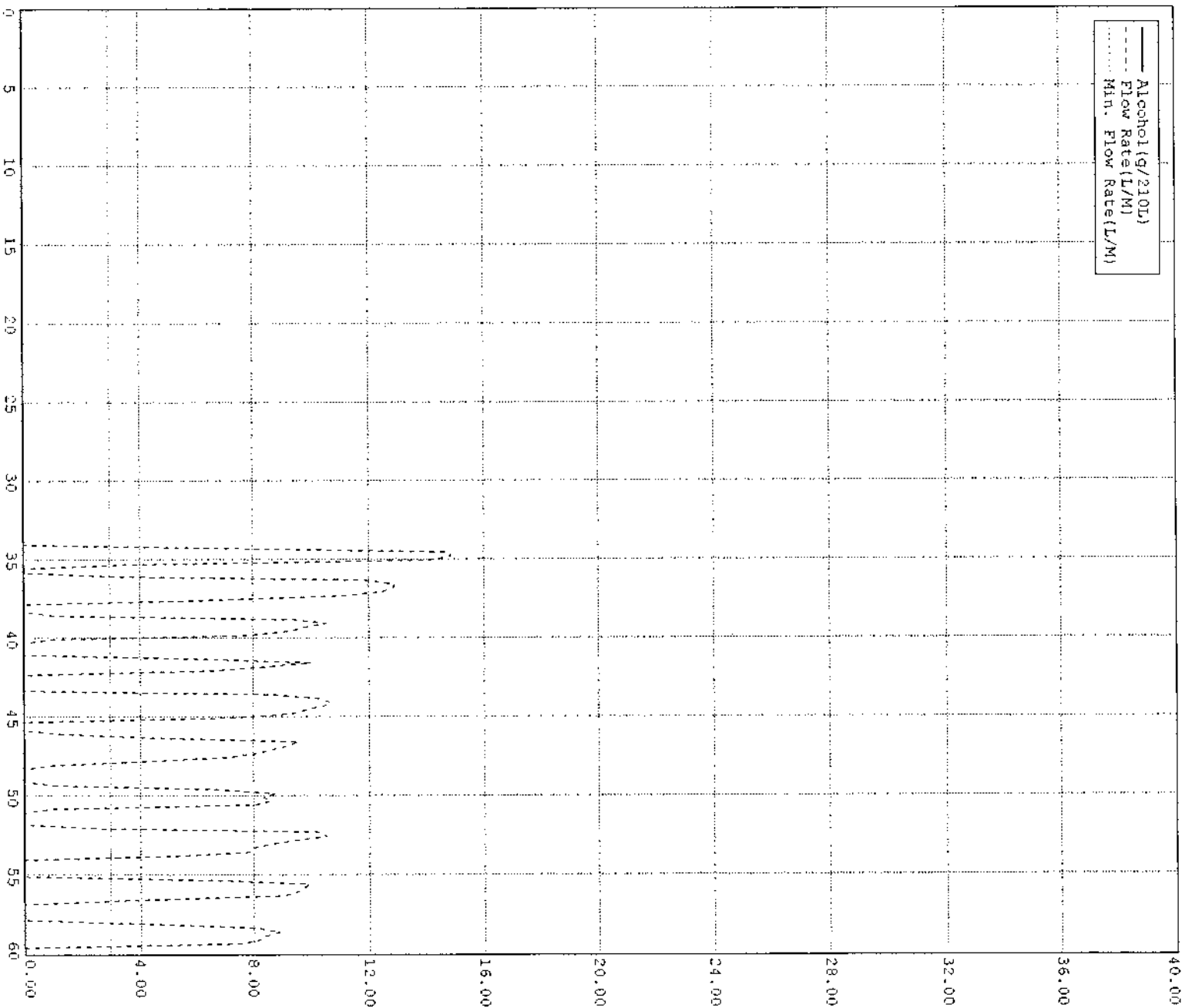
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.11: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:37
BLANK TEST	0.000	14:37
INTERNAL STANDARD	VERIFIED	14:37
EXTERNAL STANDARD	0.077	14:38
BLANK TEST	0.000	14:39
SUBJECT SAMPLE	XXX	14:40

Maximum Attempts Exceeded

POMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 11/30/2016
Time: 14:00:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

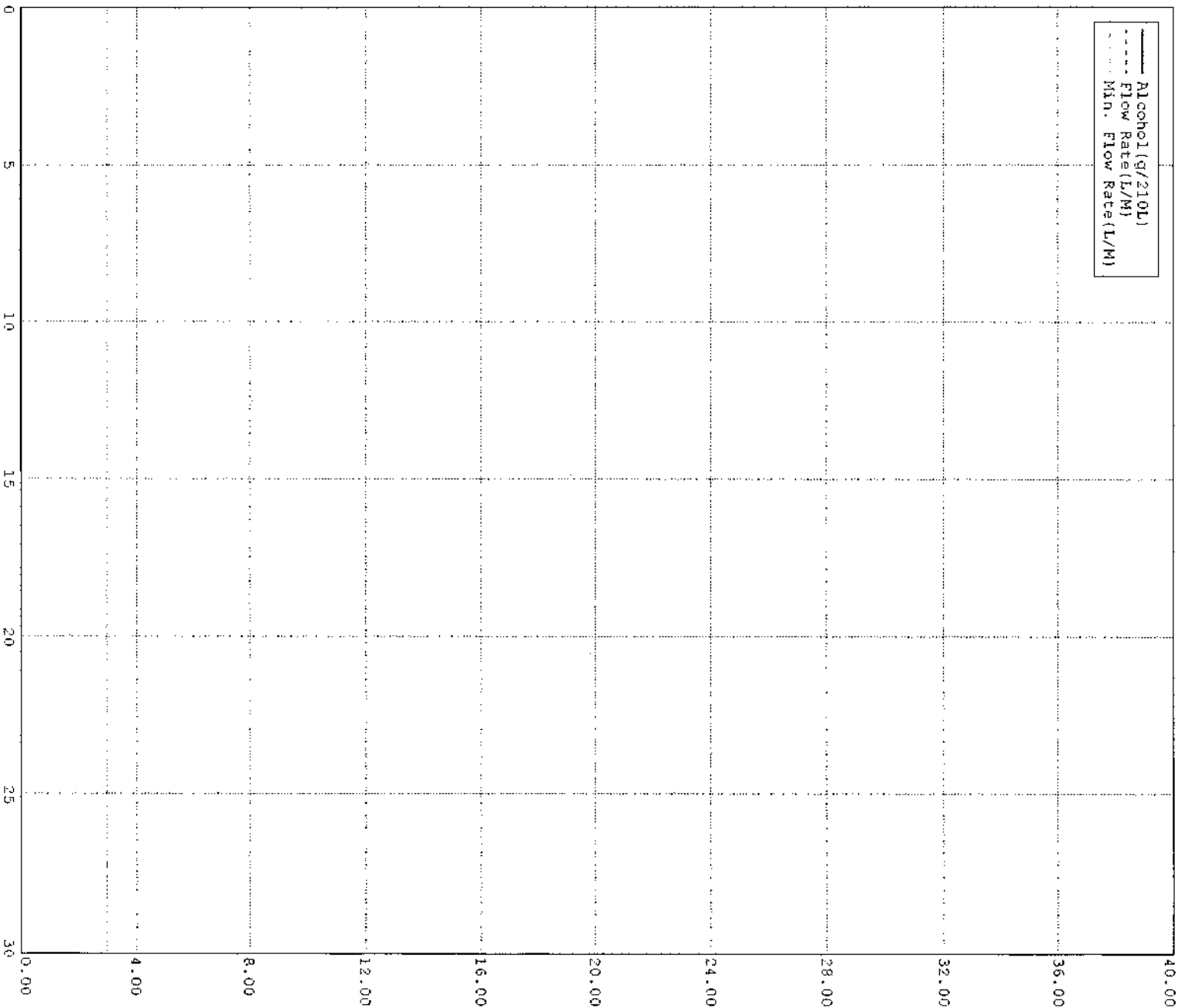
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.13: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:02
INTERNAL STANDARD VERIFIED 14:02
EXTERNAL STANDARD 0.077 14:02
BLANK TEST 0.000 14:03

RFI DETECTED

BMFB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 12/01/2016
Time: 10:17:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: XXXX

DEPT/AGENCY:
NON DRINKING SUBJECT TEST
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	10:18
BLANK TEST	0.000	10:18
INTERNAL STANDARD	VERIFIED	10:18
EXTERNAL STANDARD	0.076	10:18
BLANK TEST	0.000	10:19
SUBJECT SAMPLE (VOL=2.15L)	0.000	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.076	10:21
BLANK TEST	0.000	10:22

BNB

