

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 100418 Analyst Brandi Barnett Start Date 9/28/16

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 02915020A2 Exp 3/5/17
- ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
- iii. 0.080g/210L Mnf Airgas 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 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 15220 Level 0.100 Exp 9/28/17
 - 1. Simulator S/N SD1200 Date Calibrated 3/3/16

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 9/29/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/28/2016
Time: 10:11:00

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 47.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.80 V PASSED
(1.10 V - 2.56 V)
Cooler Voltage = 1.71 V PASSED
(1.03 V - 2.39 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 533 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.2 in

PUMP INFO

Flow Rate = 4.540 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 = 0.080 1.54% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100418

Date: 09/28/2016

Time: 10:35 AM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 47.9°C

Current Barometer 30.1 in

Volume (Ltr) 1.58

Settings

Lamp: 1.91 V

Bias: 80 V

Cooler: 1.84 V

Chopper: 534 Hz

Voltages (V)

Flow: 1.07 V

Detector: -0.057 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 05/18/2011
Time: 14:10:12

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 10260
EXPIRATION: 10/25/2010

Ca = 0.1000
CAL = 0.984347 0.800 <= CAL < 1.200
b1 = 0.0002 0.0000 <= b1 < 0.0040
b2 = 0.0065 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0791 0.0500 <= Xq < 0.2000
a21 = 1.171803 1.050 <= a21 < 1.300
a31 = 0.460593 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/28/2016
Time: 10:37:28

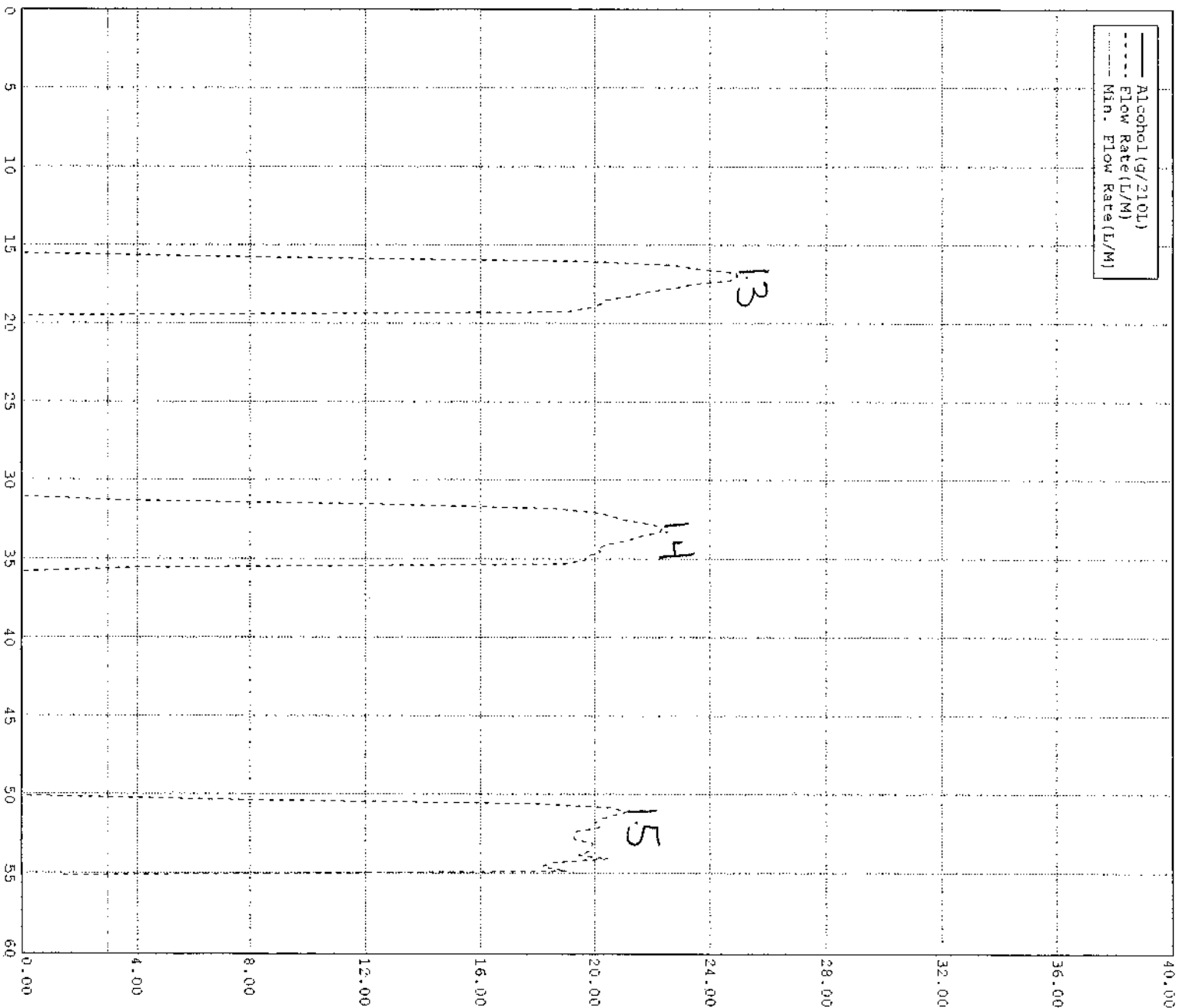
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AP 30.14: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	10:38
BLANK TEST	0.000	10:38
INTERNAL STANDARD	VERIFIED	10:38
EXTERNAL STANDARD	0.084	10:38
BLANK TEST	0.000	10:39
SUBJECT SAMPLE (Vol=1.51L)	0.000	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.084	10:42
BLANK TEST	0.000	10:43



LINEARITY CHECK

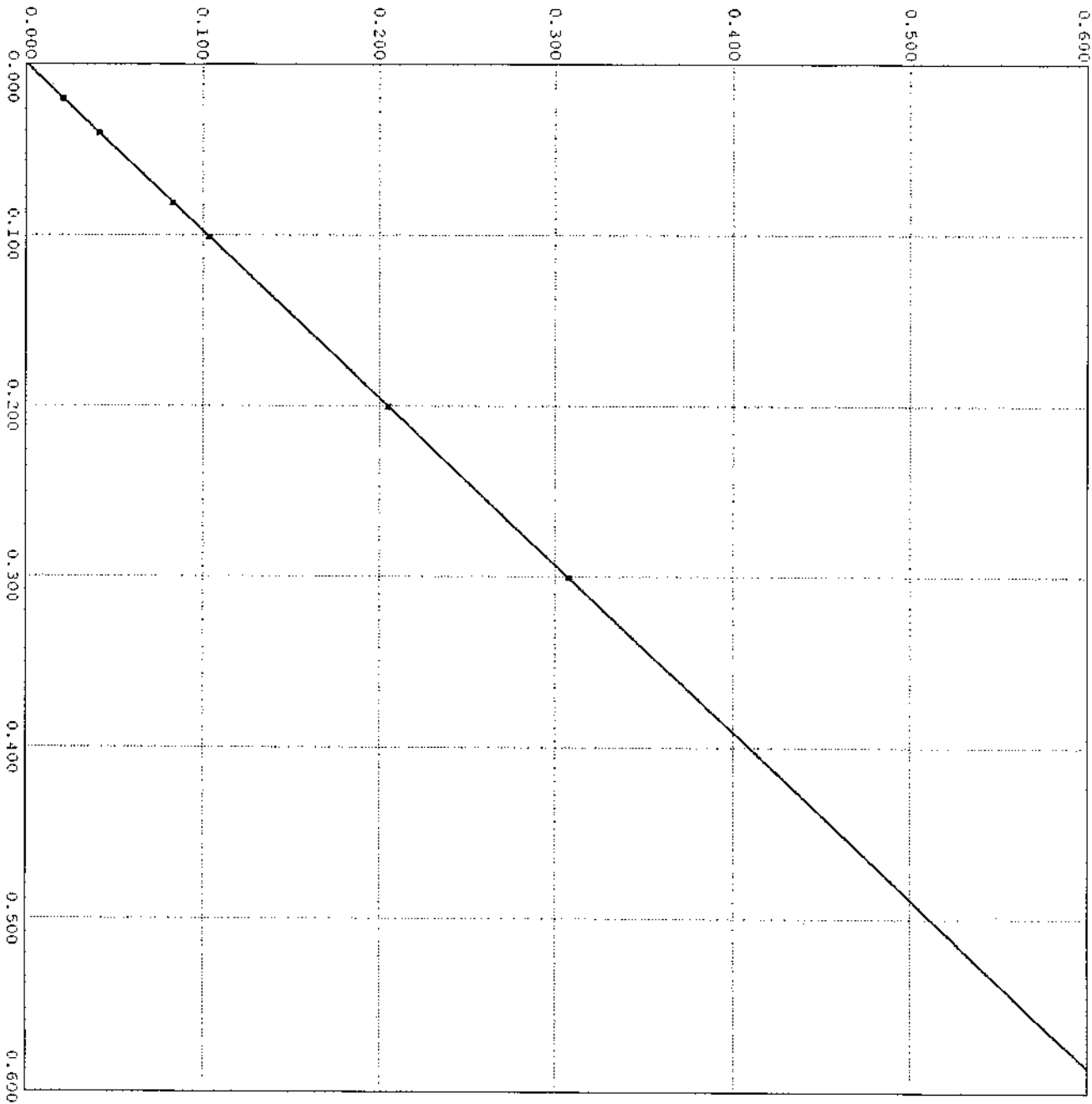
Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/28/2016
Time: 13:47:53

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0218	0.0004
0.040	0.0424	0.0005
0.081	0.0838	0.0004
0.101	0.1044	0.0005
0.200	0.2058	0.0004
0.300	0.3084	0.0005

SLOPE = 1.023508
R² = 0.999996



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100418

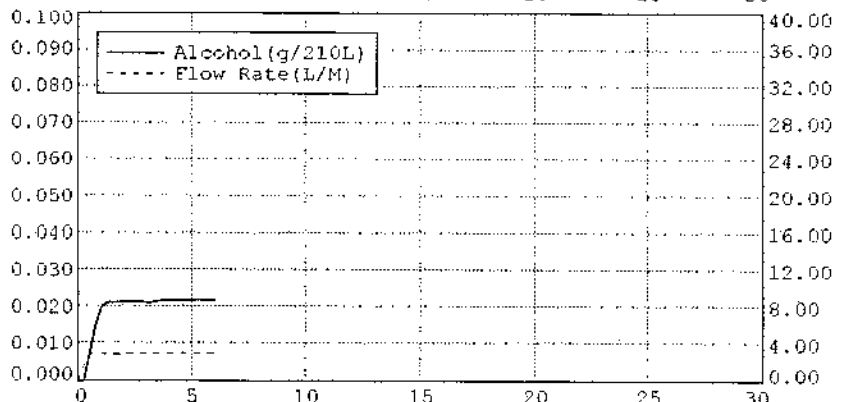
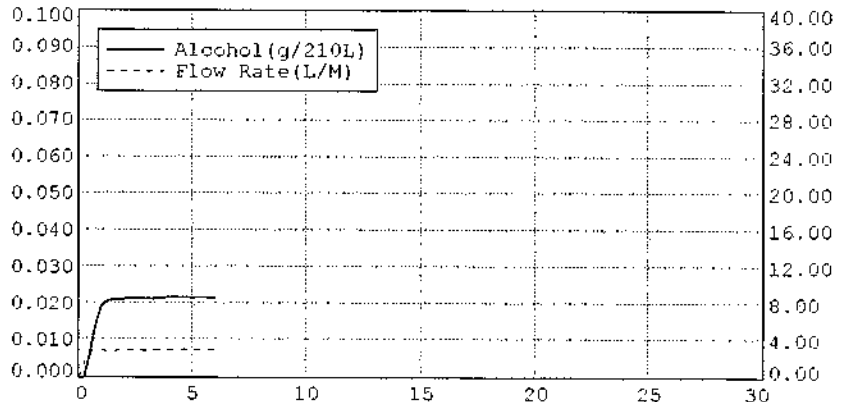
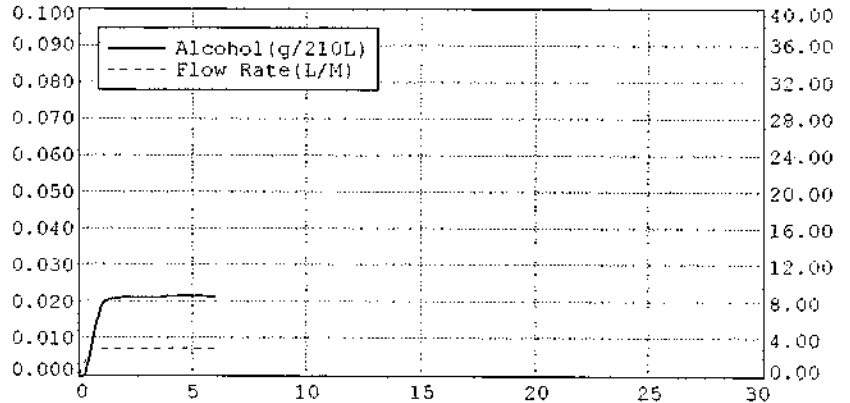
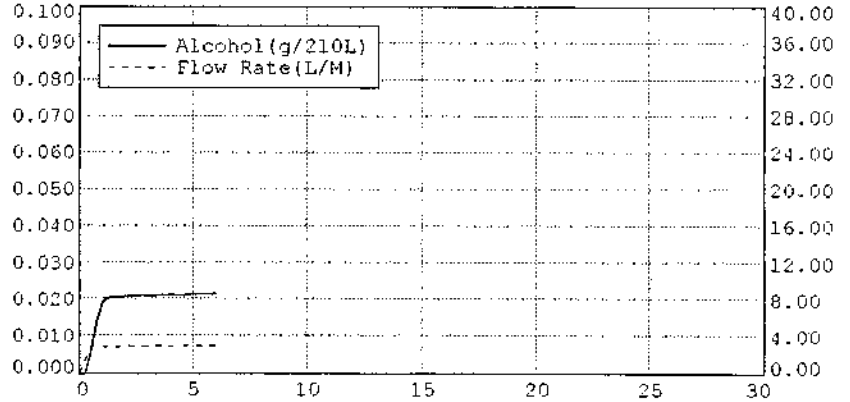
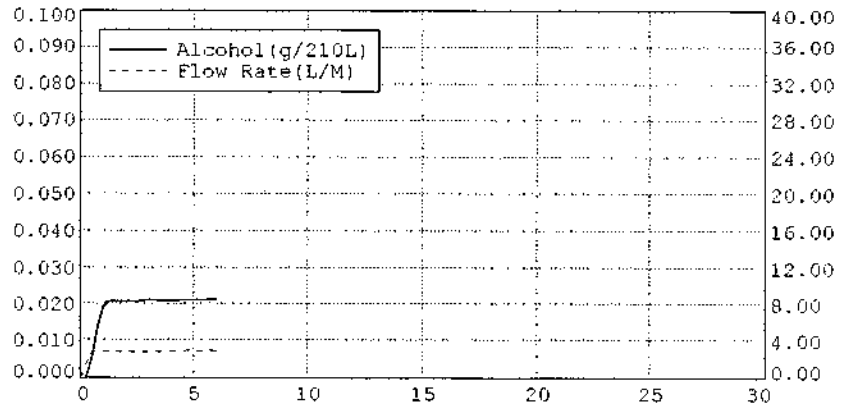
Date: 09/28/2016
 Time: 13:47:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 30.14: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 354 psi

BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.021	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.022	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.022	13:52
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.022	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.022	13:54
BLANK TEST	0.000	13:55

Average = 0.0218
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100418

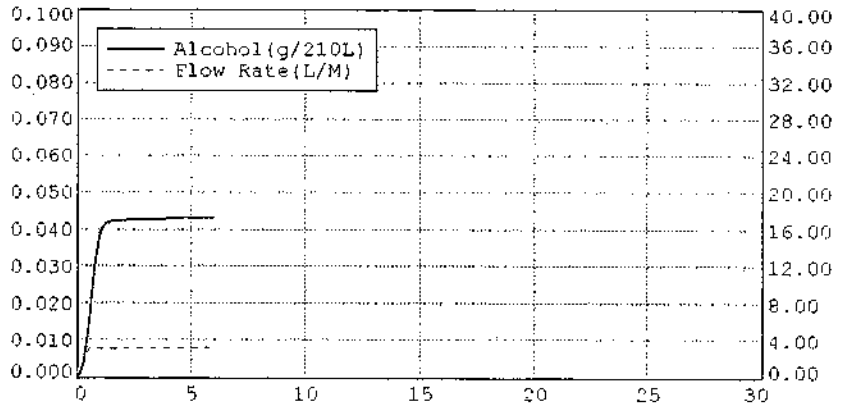
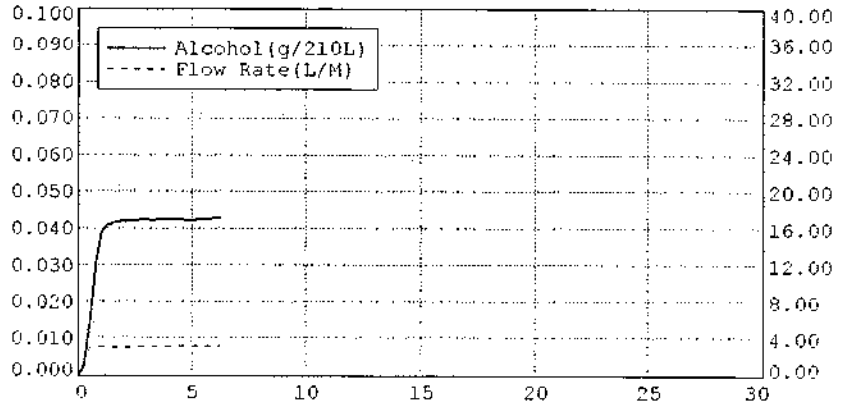
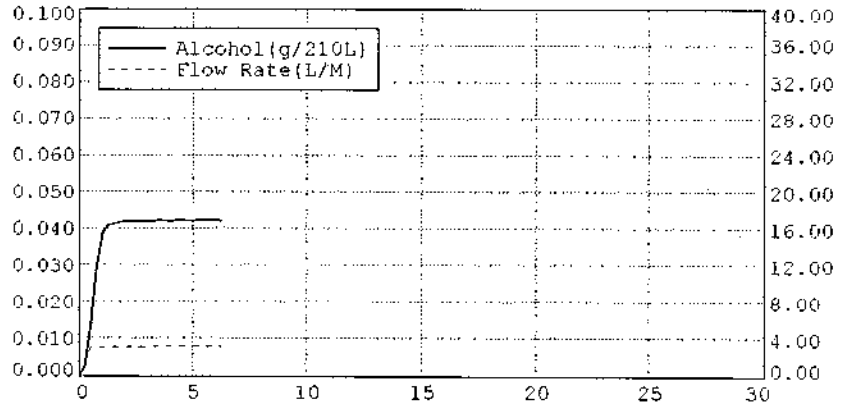
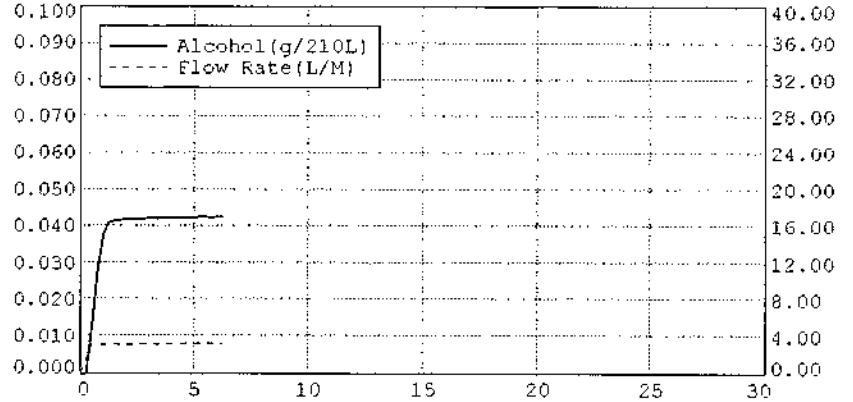
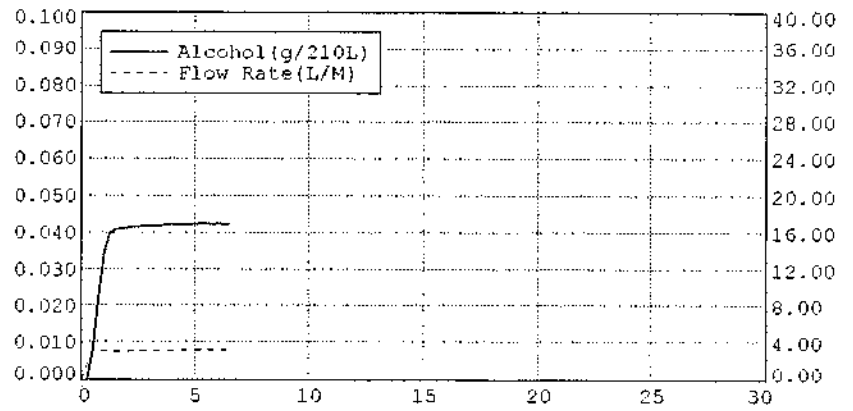
Date: 09/28/2016
 Time: 13:58:35

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 30.15: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 879 psi

BLANK TEST	0.000	13:59
INTERNAL STANDARD	VERIFIED	14:00
EXTERNAL STANDARD	0.043	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.042	14:01
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.042	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.042	14:03
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.043	14:04
BLANK TEST	0.000	14:06

Average = 0.0424
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100418

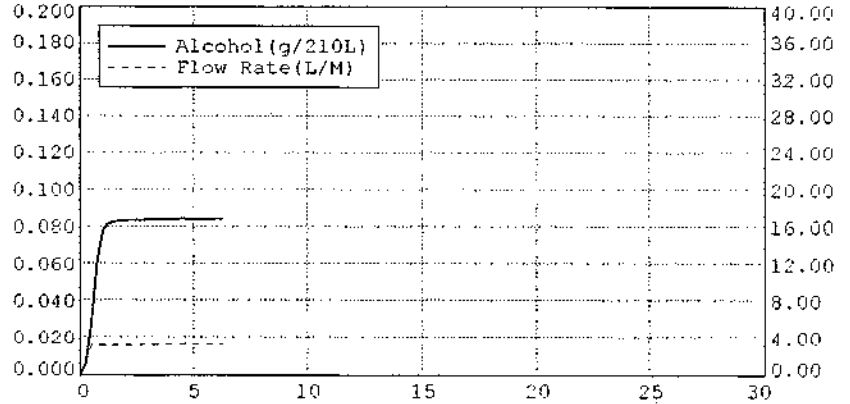
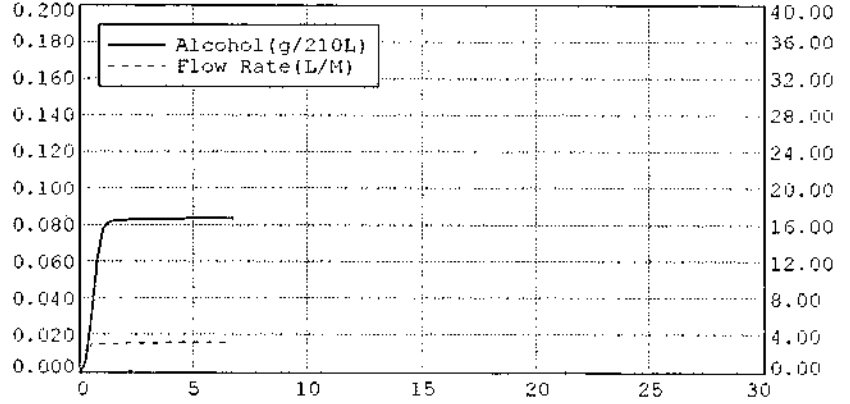
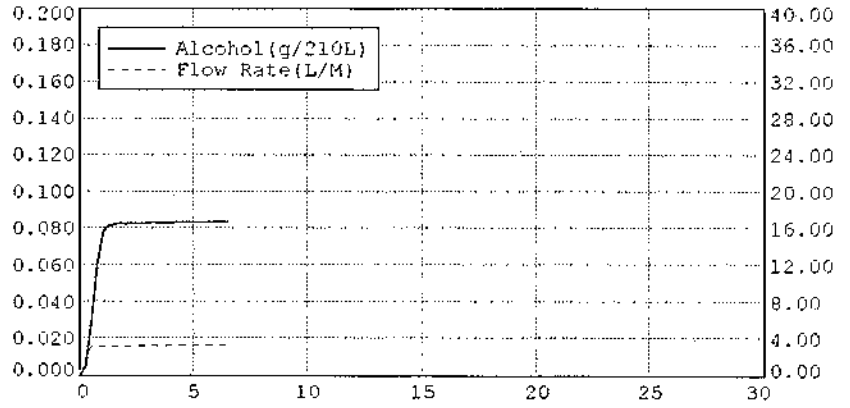
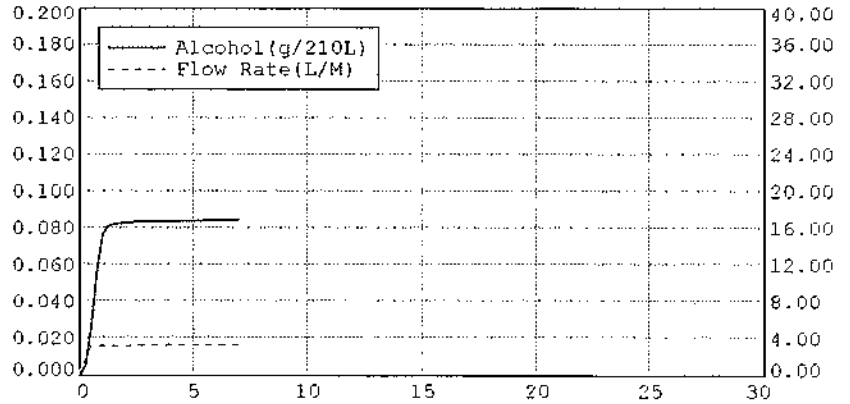
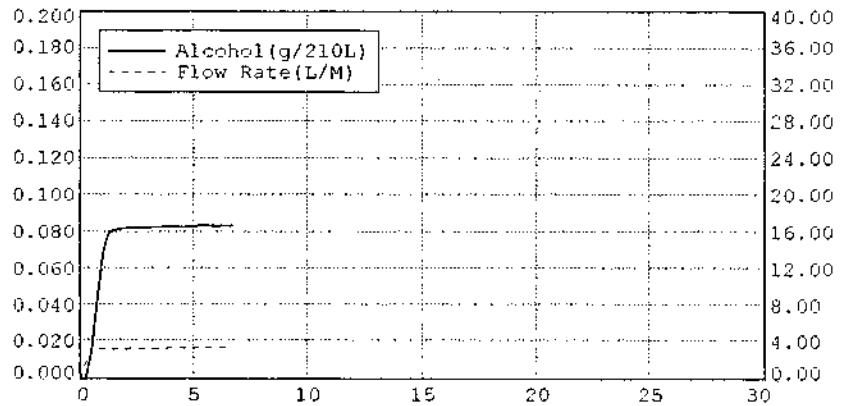
Date: 09/28/2016
 Time: 14:10:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 30.15: 0.081
 LOT #: AG608504
 EXPIRATION: 03/25/2018
 TANK PRESSURE: 990 psi

BLANK TEST	0.000	14:11
INTERNAL STANDARD	VERIFIED	14:11
EXTERNAL STANDARD	0.083	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.084	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.084	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.084	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.084	14:16
BLANK TEST	0.000	14:17

Average = 0.0838
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

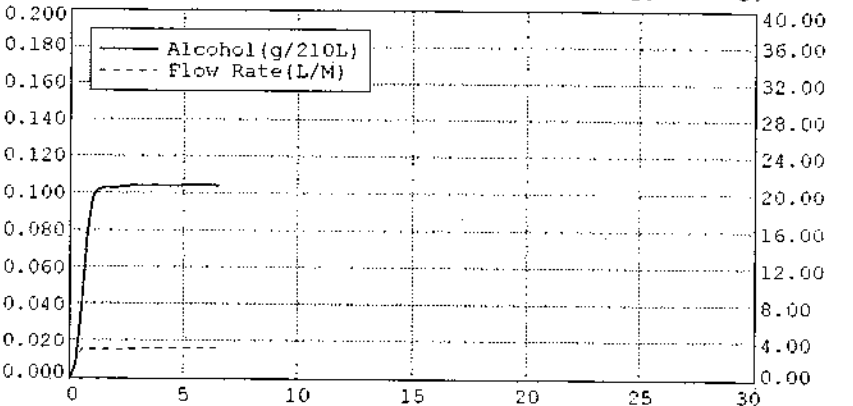
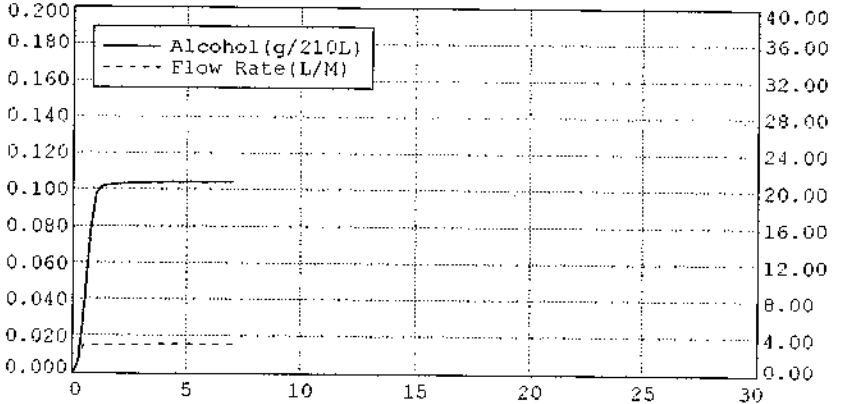
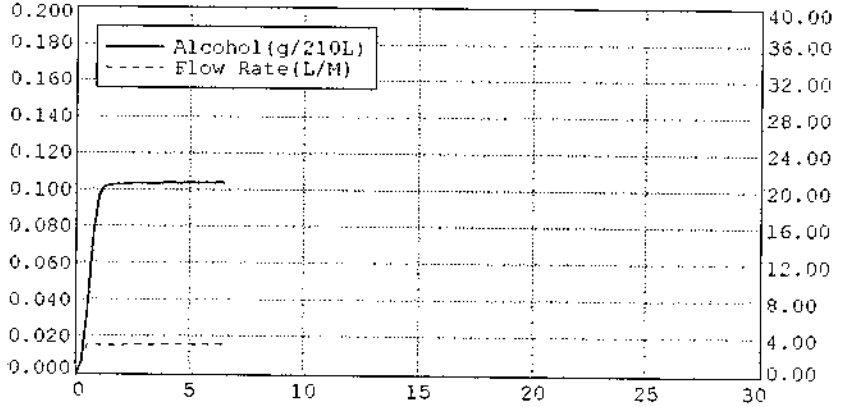
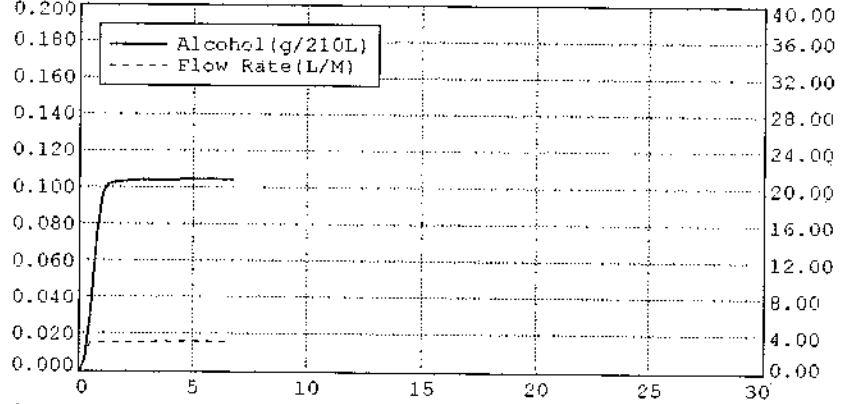
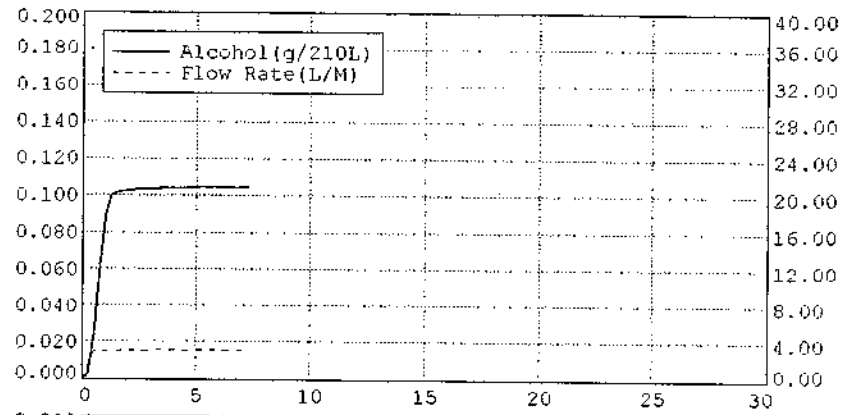
Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/28/2016
Time: 14:21:37

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.100
TARGET AT 30.15: 0.101
LOT #: 02915100A1
EXPIRATION: 03/05/2017
TANK PRESSURE: 962 psi

BLANK TEST	0.000	14:23
INTERNAL STANDARD	VERIFIED	14:23
EXTERNAL STANDARD	0.105	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.105	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.104	14:25
BLANK TEST	0.000	14:26
EXTERNAL STANDARD	0.104	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.104	14:28
BLANK TEST	0.000	14:29

Average = 0.1044
Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100418

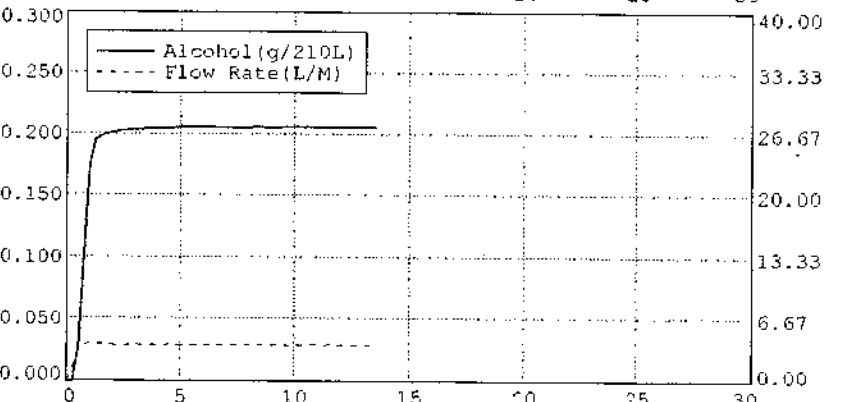
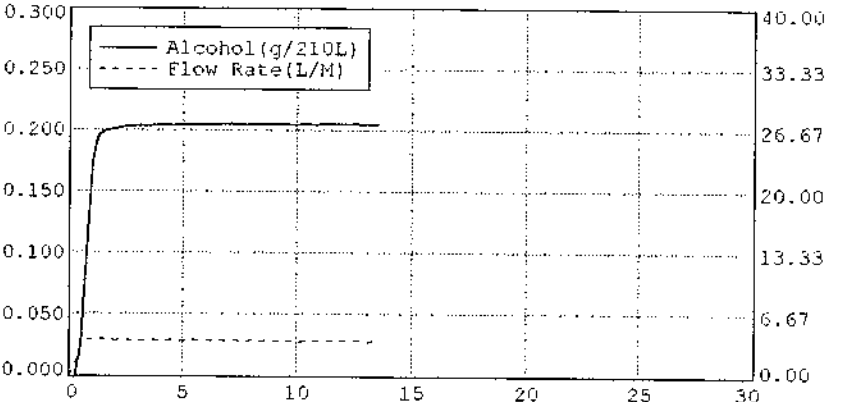
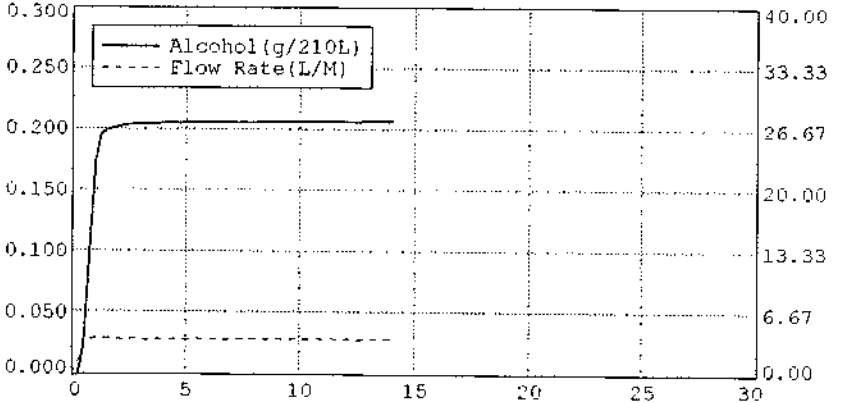
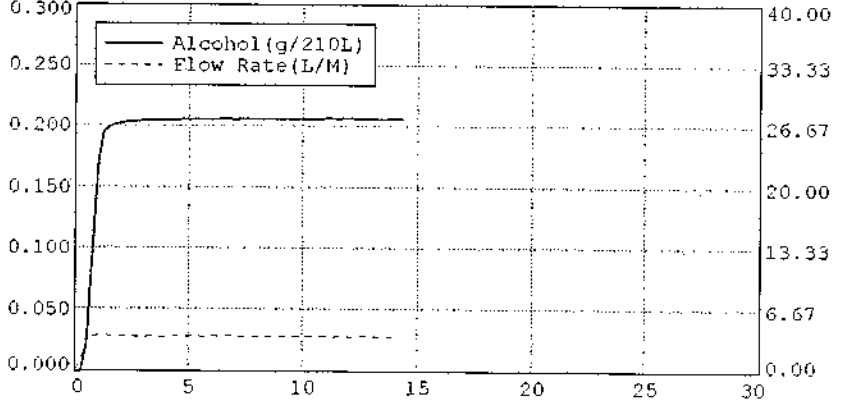
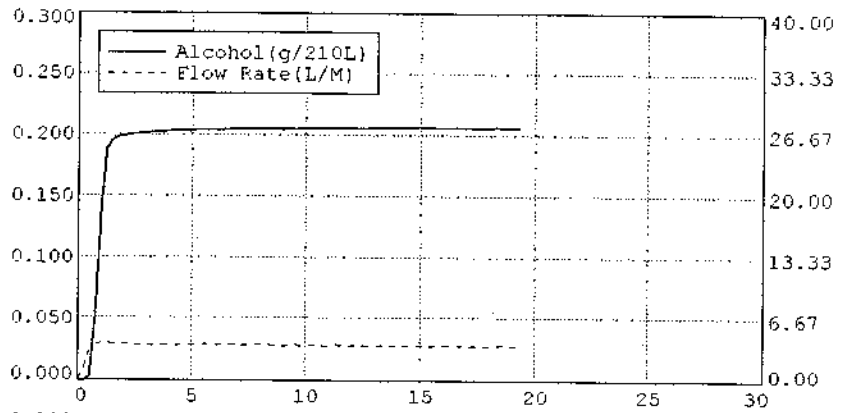
Date: 09/28/2016
 Time: 14:33:05

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:34
INTERNAL STANDARD	VERIFIED	14:34
EXTERNAL STANDARD	0.206	14:35
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.206	14:36
BLANK TEST	0.000	14:37
EXTERNAL STANDARD	0.206	14:37
BLANK TEST	0.000	14:38
EXTERNAL STANDARD	0.205	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.206	14:40
BLANK TEST	0.000	14:41

Average = 0.2058
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100418

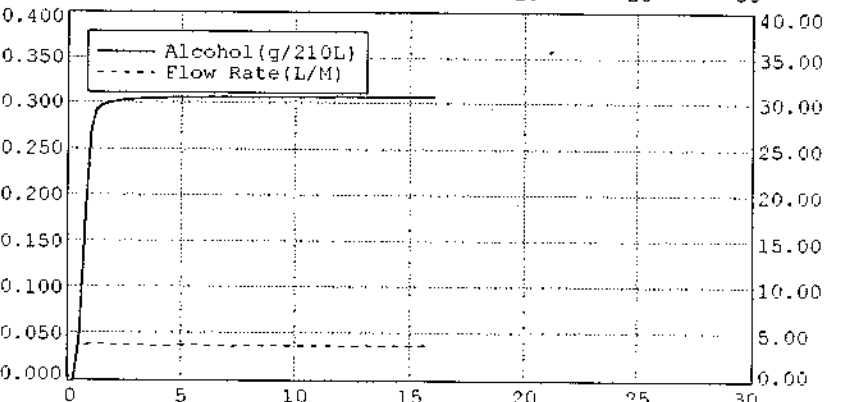
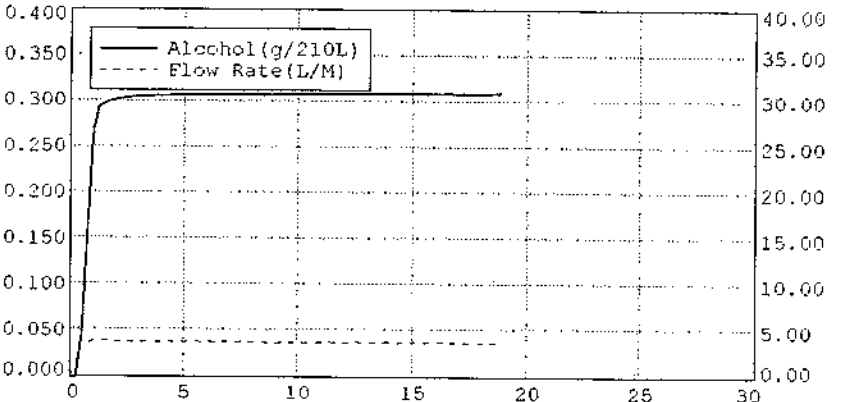
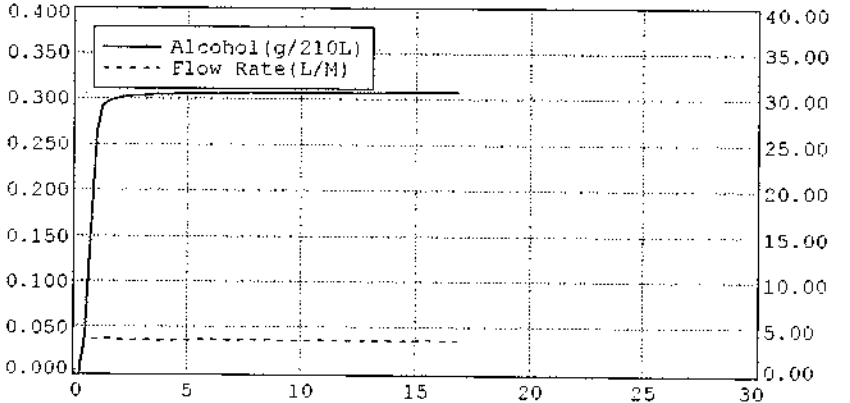
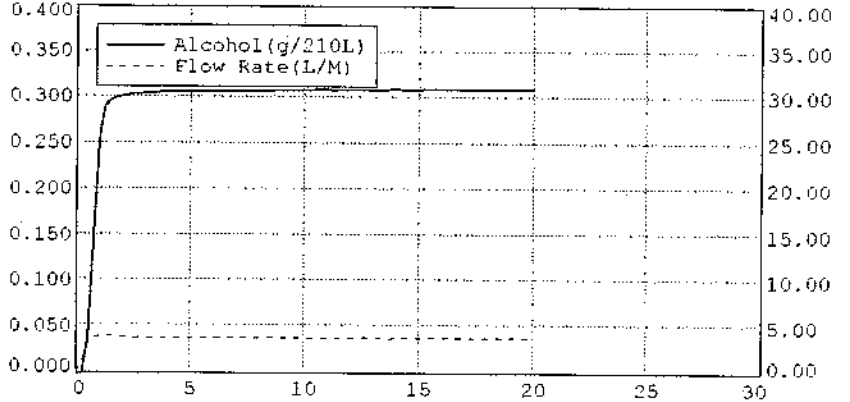
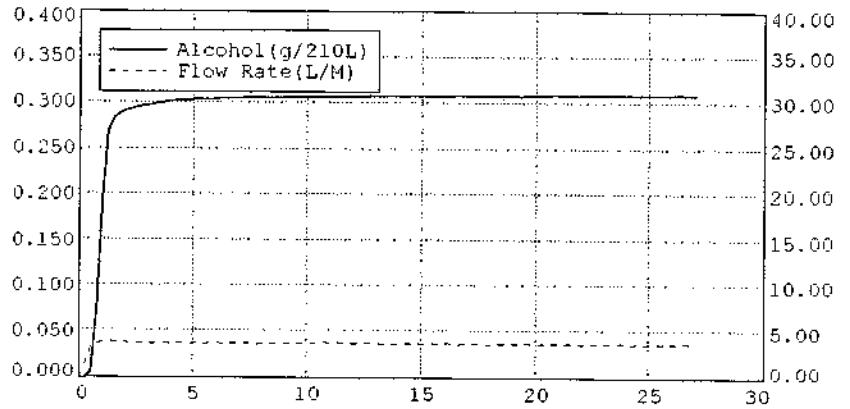
Date: 09/28/2016
 Time: 14:45:21

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:46
INTERNAL STANDARD	VERIFIED	14:46
EXTERNAL STANDARD	0.309	14:47
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.309	14:48
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.308	14:50
BLANK TEST	0.000	14:51
EXTERNAL STANDARD	0.308	14:51
BLANK TEST	0.000	14:52
EXTERNAL STANDARD	0.308	14:52
BLANK TEST	0.000	14:53

Average = 0.3084
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/29/2016
Time: 09:48:57

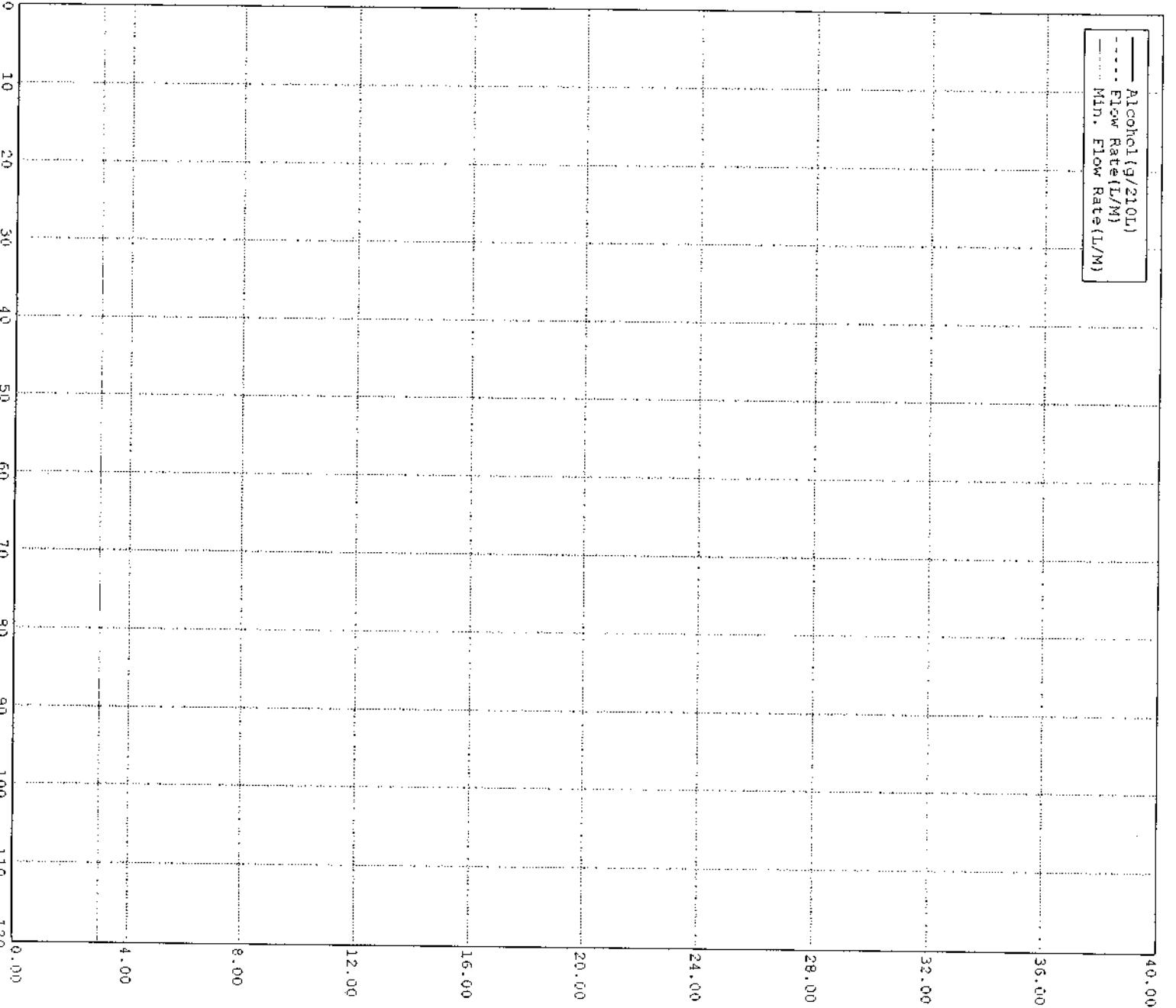
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.30: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	09:50
BLANK TEST	0.000	09:50
INTERNAL STANDARD	VERIFIED	09:50
EXTERNAL STANDARD	0.084	09:50
BLANK TEST	0.000	09:52
SUBJECT SAMPLE	INCOMPLETE	09:54



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100418

Date: 09/29/2016
Time: 10:18:37

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

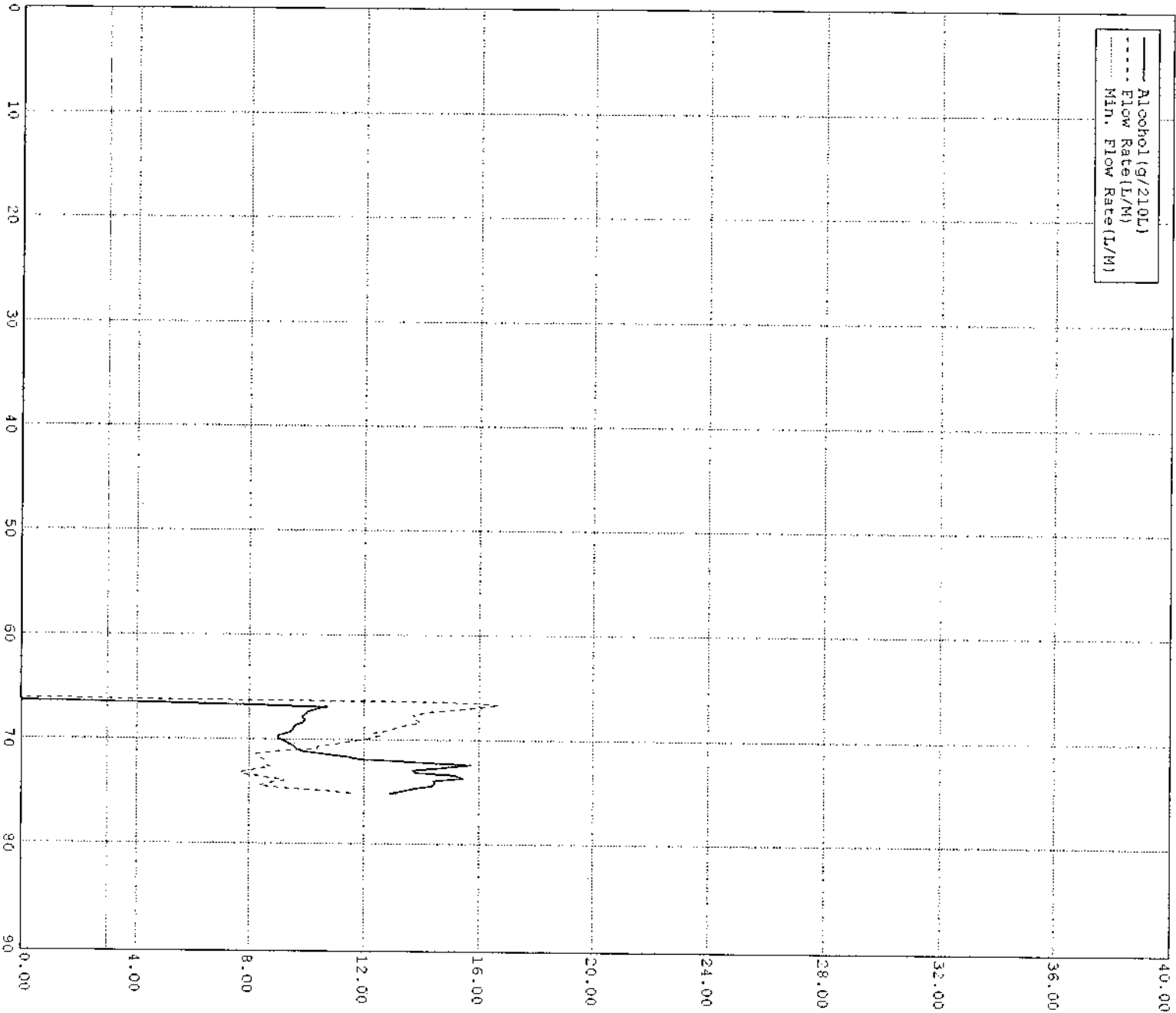
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.30: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	10:22
BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:22
EXTERNAL STANDARD	0.084	10:22
BLANK TEST	0.000	10:23
SUBJECT SAMPLE	INVALID	10:24

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/29/2016
Time: 12:40:24

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.31: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 12:41
BLANK TEST 0.000 12:41
INTERNAL STANDARD VERIFIED 12:41
Xq = 0.080 (0.99%) 0.084 12:41
EXTERNAL STANDARD X[1] = 0.0845 (-0.0016) (0.0005)
BLANK TEST 0.000 12:42
SUBJECT SAMPLE XXX 12:43
X[1] = 0.1100 (-0.0173) (-0.0008)

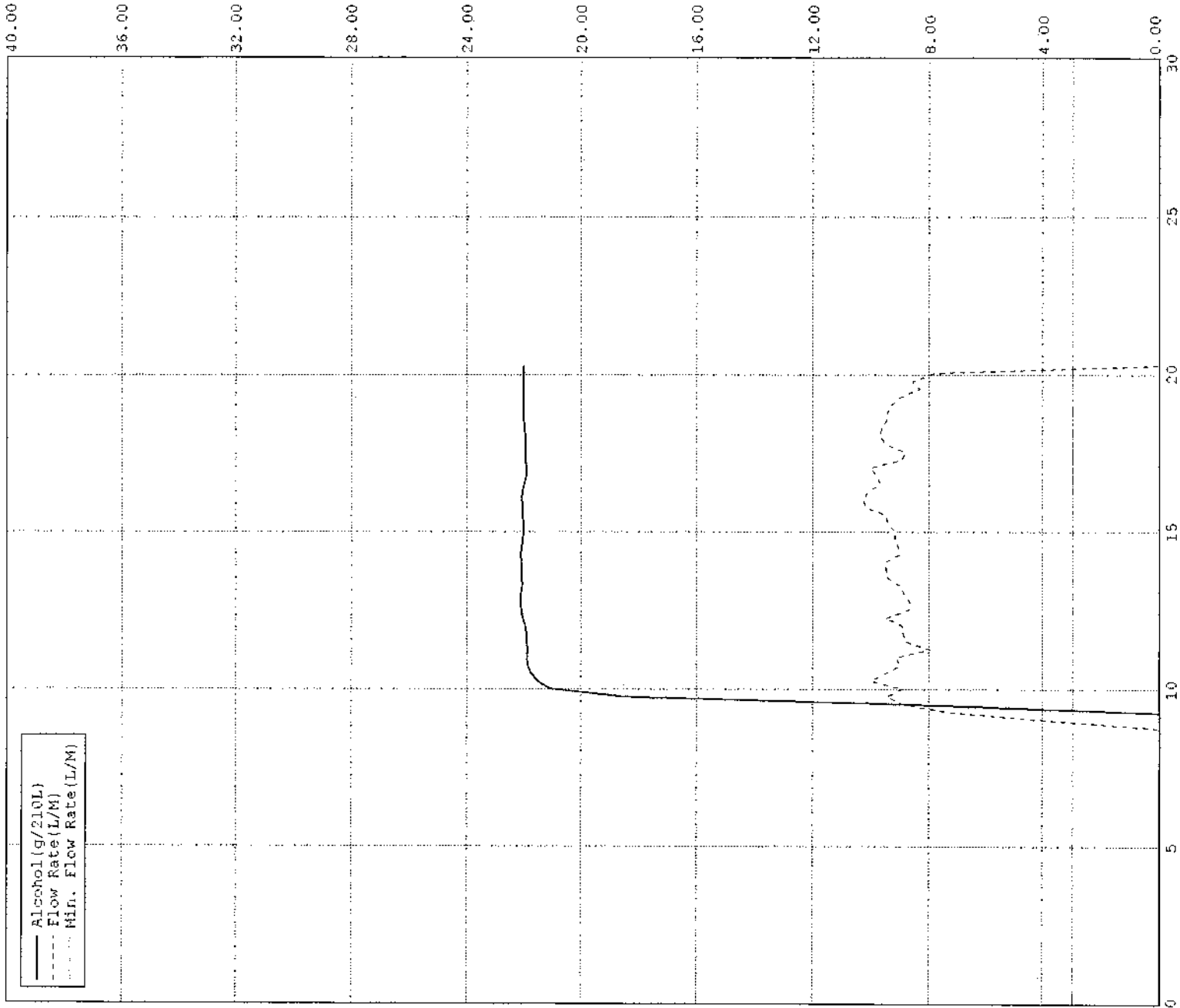
Interference Detected

Filter 2 Avg: -0.0018

Filter 3 Avg: 0.0006

BMB 9/29/16

fmb



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/29/2016
Time: 12:51:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

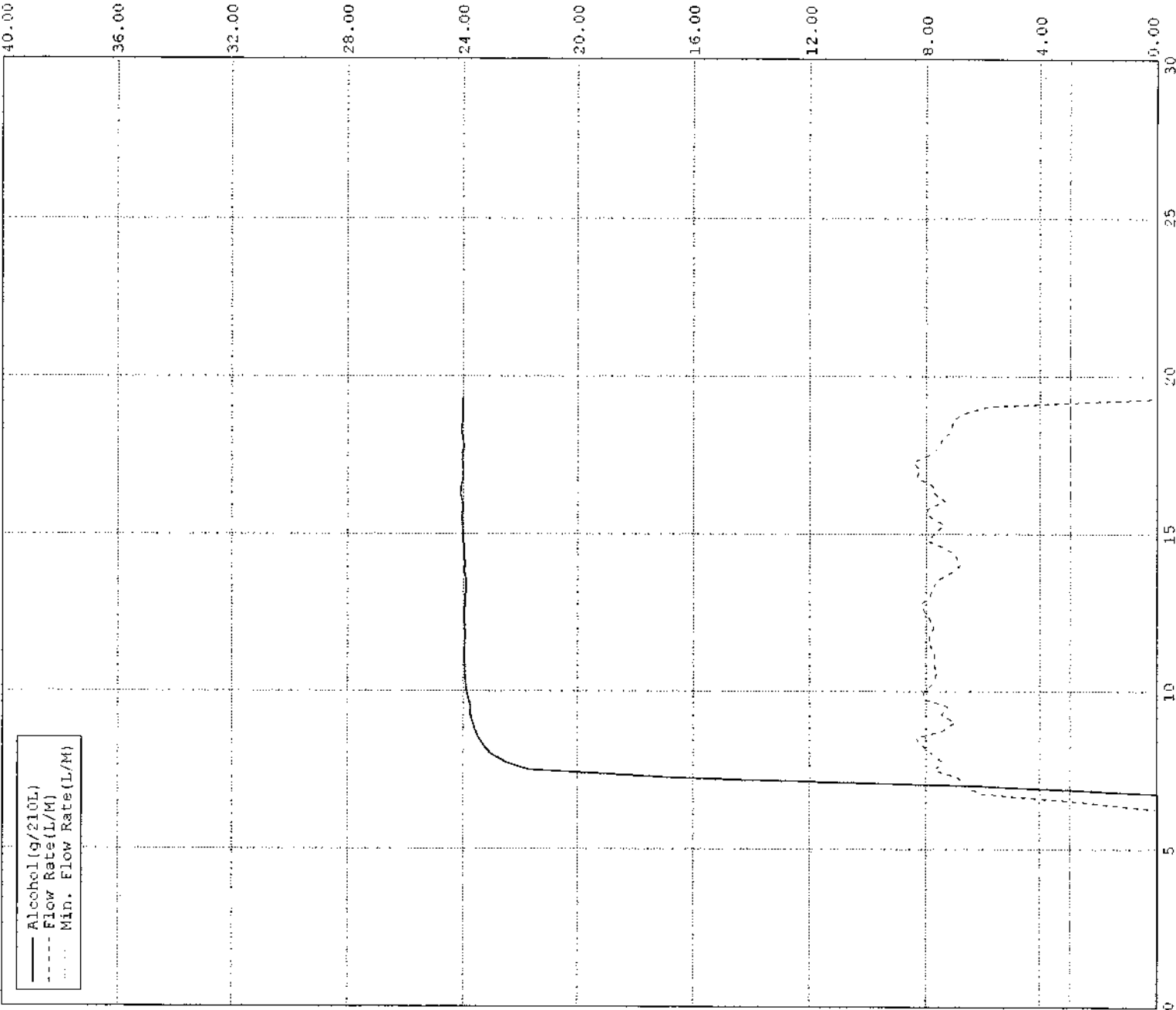
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.31: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 12:52
BLANK TEST 0.000 12:52
INTERNAL STANDARD VERIFIED 12:52
Xq = 0.080 (0.99%)
EXTERNAL STANDARD 0.085 12:52
X[1] = 0.0845 (-0.0013) (0.0012)
BLANK TEST 0.000 12:53
SUBJECT SAMPLE XXX 12:54
X[1] = 0.1202 (-0.0274) (-0.0006)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100418

Date: 09/29/2016
Time: 12:56:30

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 30.30: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	12:58
BLANK TEST	0.000	12:58
INTERNAL STANDARD	VERIFIED	12:58
Xq = 0.080 (1.21%)		
EXTERNAL STANDARD	0.084	12:59
X[1] = 0.0844 (-0.0021) (0.0007)		
BLANK TEST	0.000	13:00
SUBJECT SAMPLE (Vol=1.80L)	0.097	13:00
X[1] = 0.0976 (0.0000) (-0.0007)		
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.084	13:01
X[1] = 0.0837 (-0.0023) (-0.0001)		
BLANK TEST	0.000	13:02



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER Gmt: 100418

Date: 09/29/2016
Time: 10:45:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

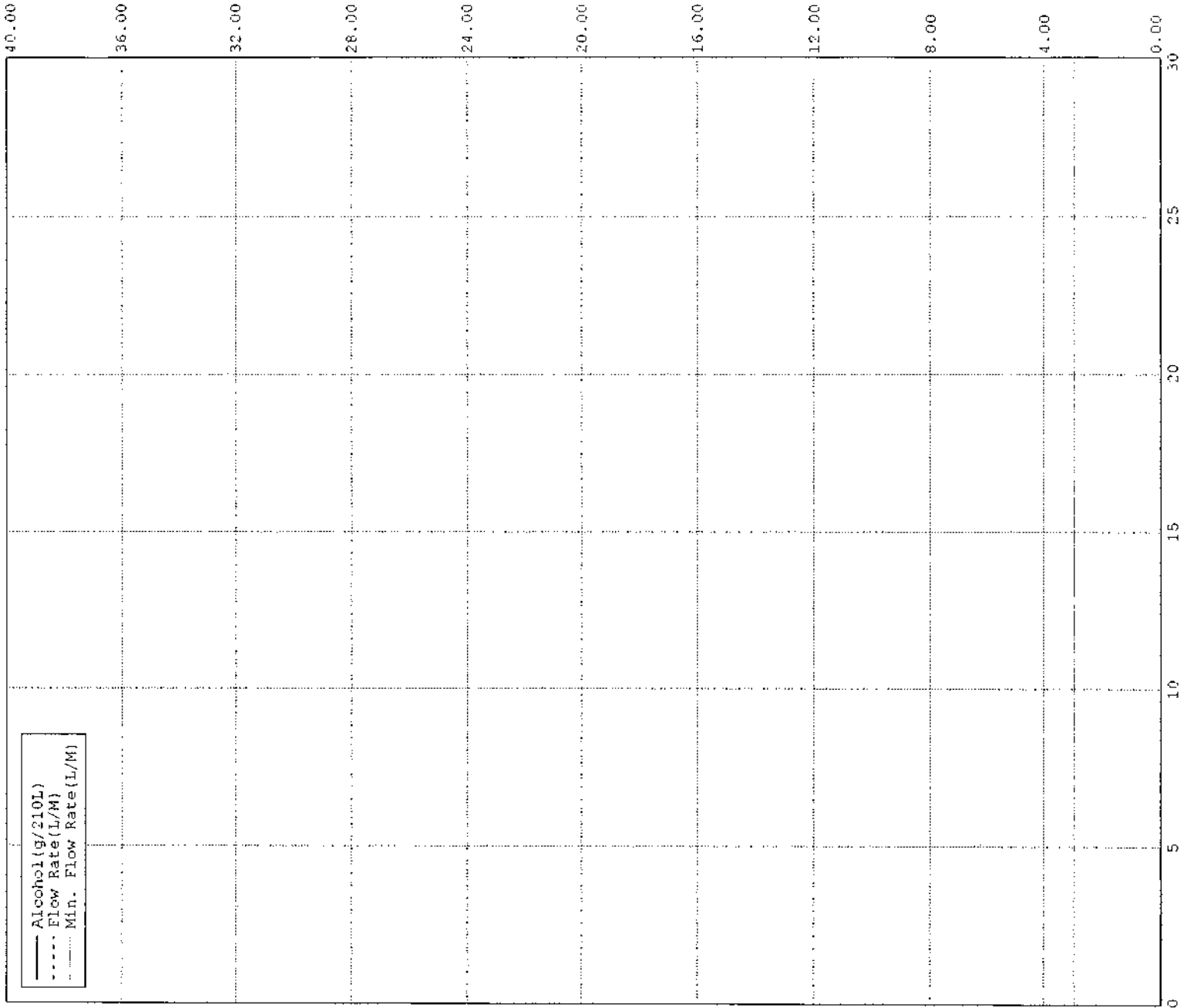
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.30: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 10:48
BLANK TEST 0.000 10:48
INTERNAL STANDARD VERIFIED 10:48
EXTERNAL STANDARD 0.084 10:48
BLANK TEST 0.000 10:49

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/29/2016
Time: 10:26:58

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

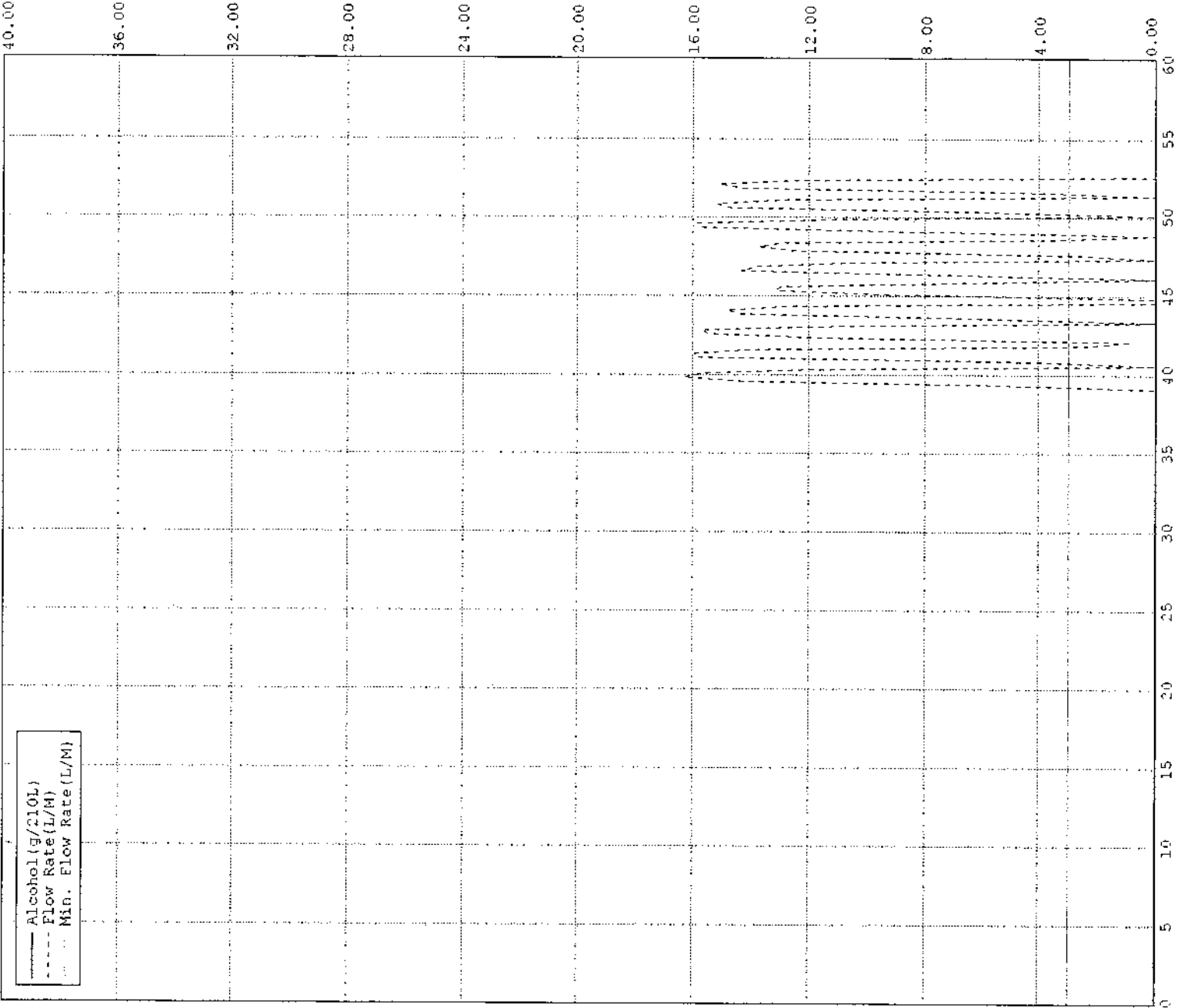
DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.30: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 10:30
BLANK TEST 0.000 10:30
INTERNAL STANDARD VERIFIED 10:30
EXTERNAL STANDARD 0.084 10:30
BLANK TEST 0.000 10:31
SUBJECT SAMPLE XXX 10:32

Maximum Attempts Exceeded

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 09/29/2016
Time: 13:19:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.31: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:21
BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:21
EXTERNAL STANDARD	0.085	13:21
BLANK TEST	0.000	13:22
SUBJECT SAMPLE (Vol=2.05L)	0.000	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.085	13:24
BLANK TEST	0.000	13:25

