

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 100400 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: 100400

Date: 09/28/2016
Time: 10:10:19

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 = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.63 V PASSED
(1.00 V - 2.32 V)
Cooler Voltage = 1.64 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 78 V PASSED
(47 V - 109 V)
Chopper Freq = 528 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.520 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 = 0.101 0.79% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100400

Date: 09/28/2016
Time: 10:24 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 48.1°C

Current Barometer 30.1 in
Volume (Ltr) 1.58

Settings
Lamp: 1.66 V
Bias: 78 V
Cooler: 1.64 V
Chopper: 527 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.051 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 02/19/2013
Time: 09:50:53

Ca = 0.1010
CAL = 0.979070 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0037 0.0010 <= b2 < 0.0100
b3 = 0.0002 0.0000 <= b3 < 0.0040
Xq = 0.0999 0.0500 <= Xq < 0.2000
a21 = 1.192698 1.050 <= a21 < 1.300
a31 = 0.464521 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/28/2016
Time: 10:25:37

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

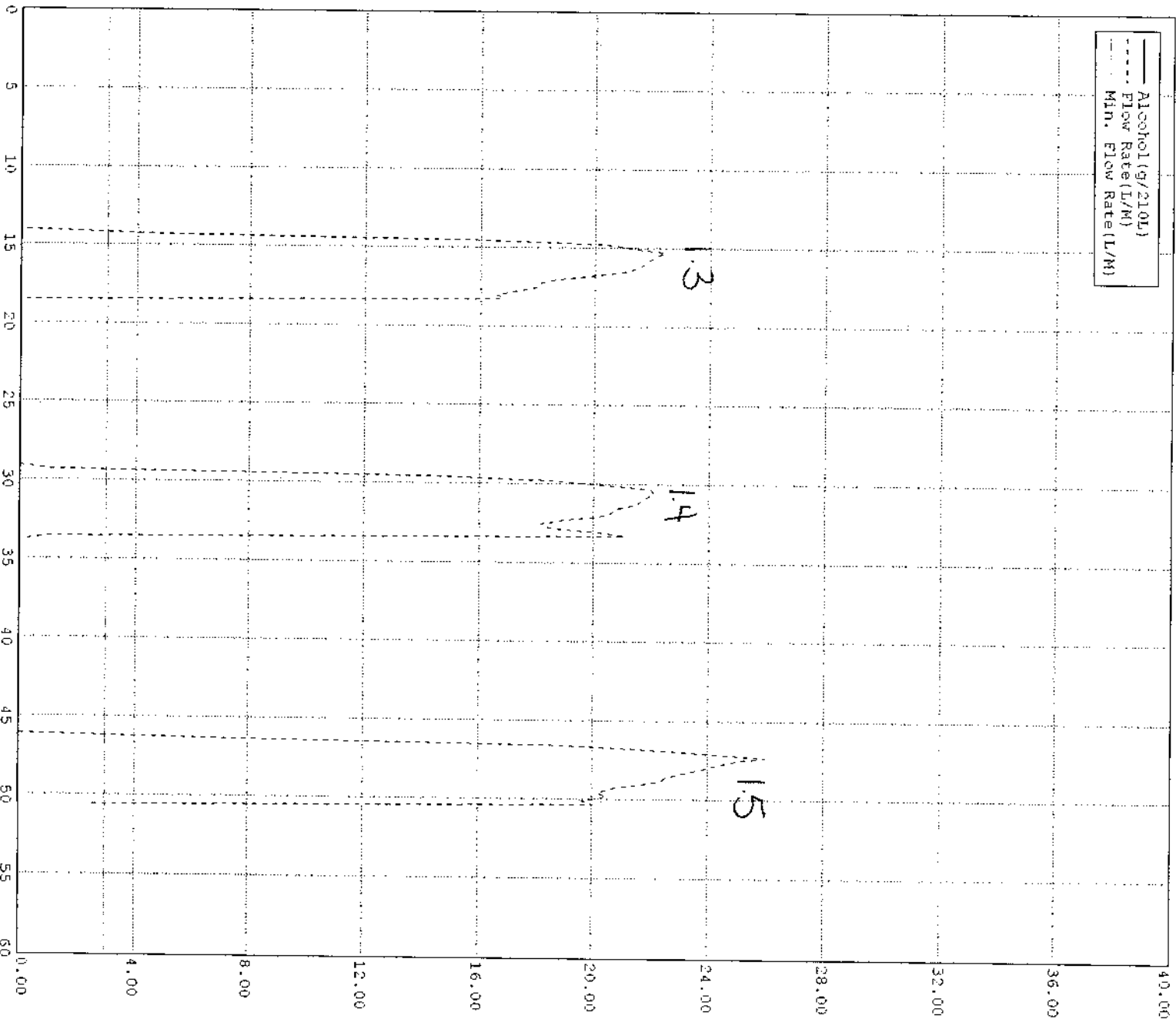
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.15: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	10:26
BLANK TEST	0.000	10:26
INTERNAL STANDARD	VERIFIED	10:26
EXTERNAL STANDARD	0.081	10:27
BLANK TEST	0.000	10:28
SUBJECT SAMPLE (Vol=1.5IL)	0.000	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.080	10:30
BLANK TEST	0.000	10:30

BMB



LINEARITY CHECK

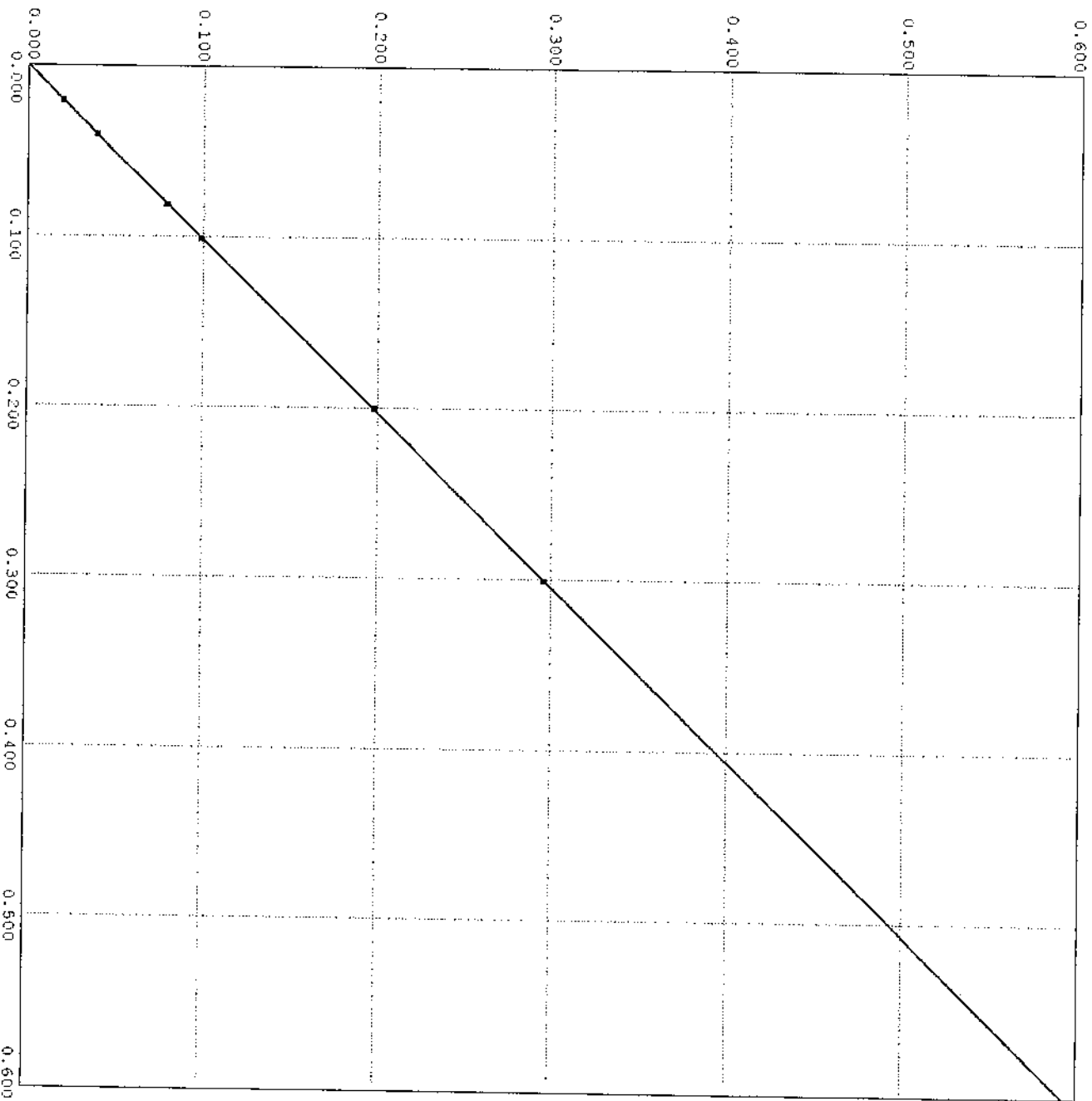
Alaska Department of Public Safety
 DATAMASTER dmt: 100400

Date: 09/28/2016
 Time: 13:37:46

SUPERVISOR NAME:
 BRANDI BARNETT
 OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.040	0.0404	0.0005
0.081	0.0800	0.0000
0.101	0.0998	0.0004
0.200	0.1988	0.0008
0.300	0.2966	0.0005

SLOPE = 0.987423
 R² = 0.999976



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100400

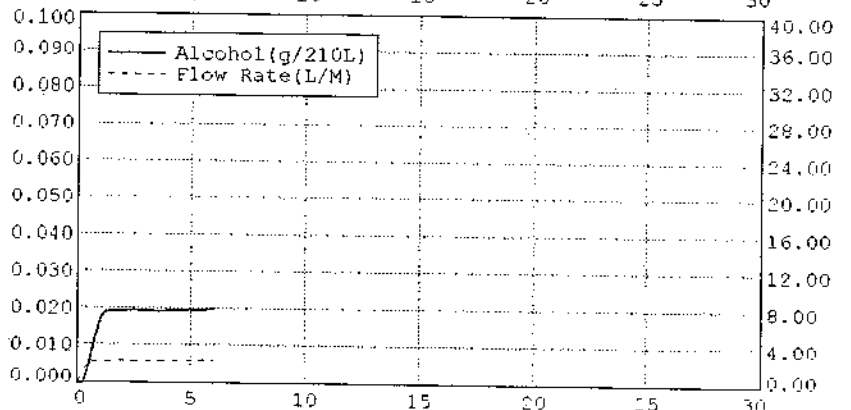
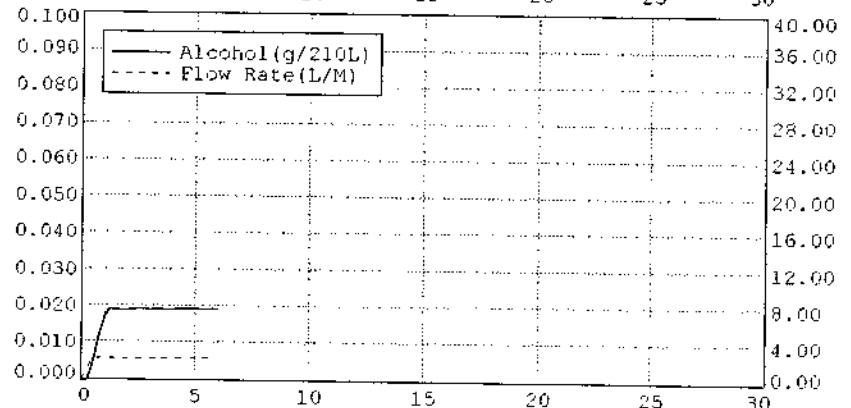
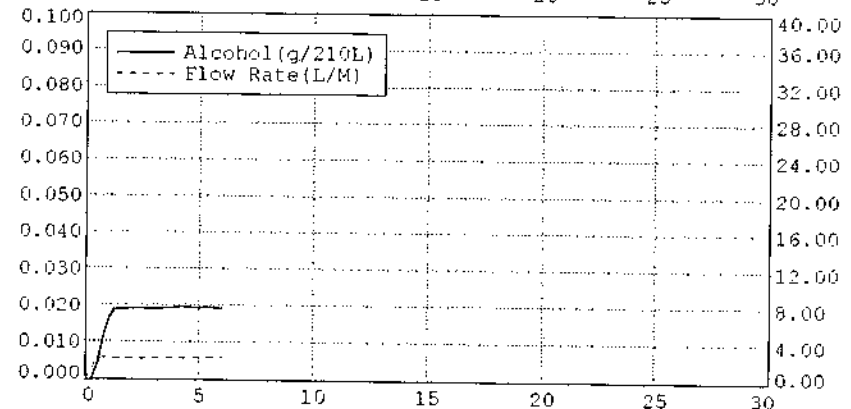
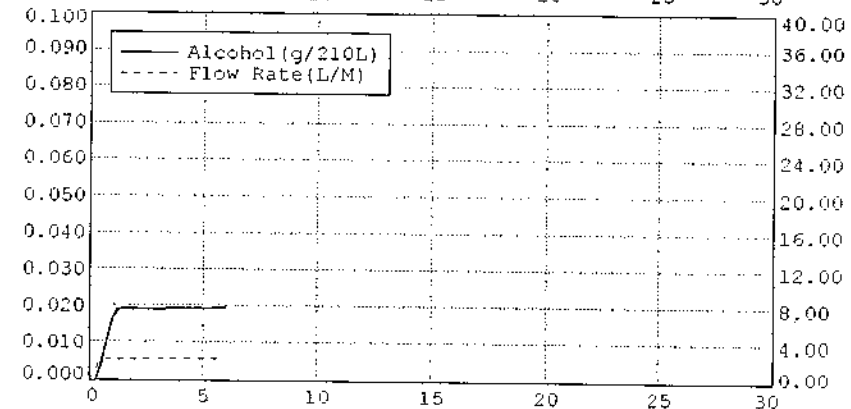
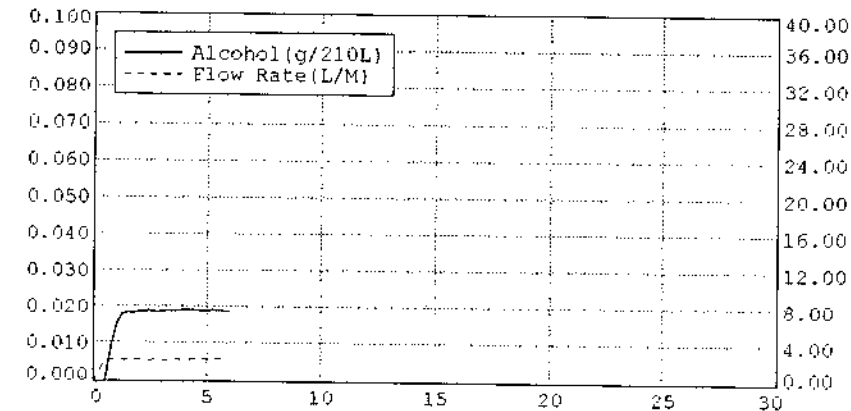
Date: 09/28/2016
 Time: 13:37:48

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 30.16: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 363 psi

BLANK TEST	0.000	13:39
INTERNAL STANDARD	VERIFIED	13:39
EXTERNAL STANDARD	0.020	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.021	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.021	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.020	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.021	13:43
BLANK TEST	0.000	13:44

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100400

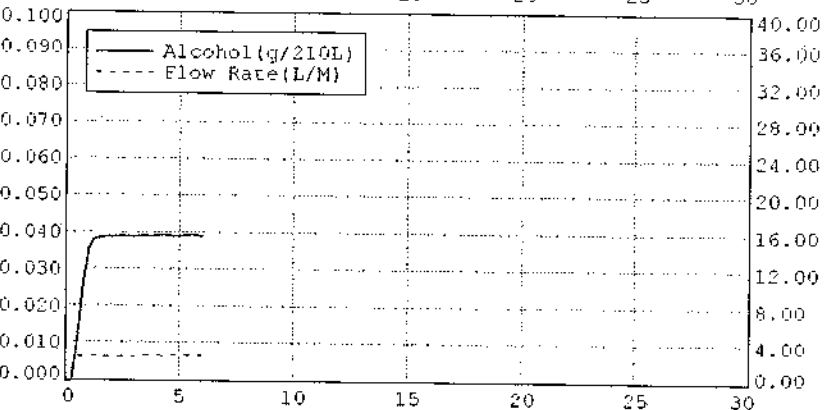
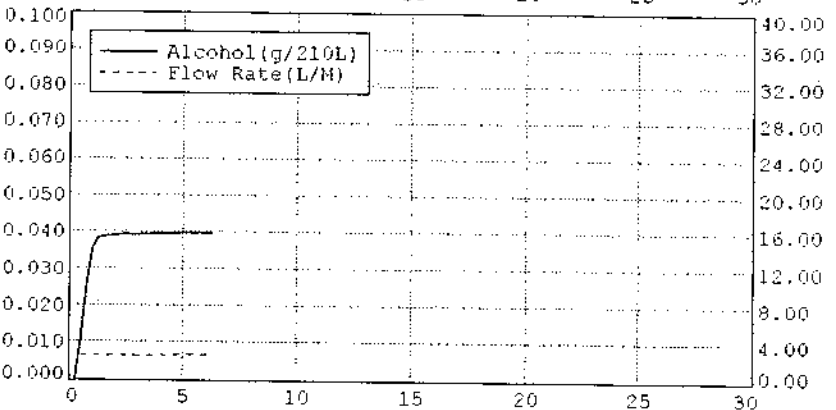
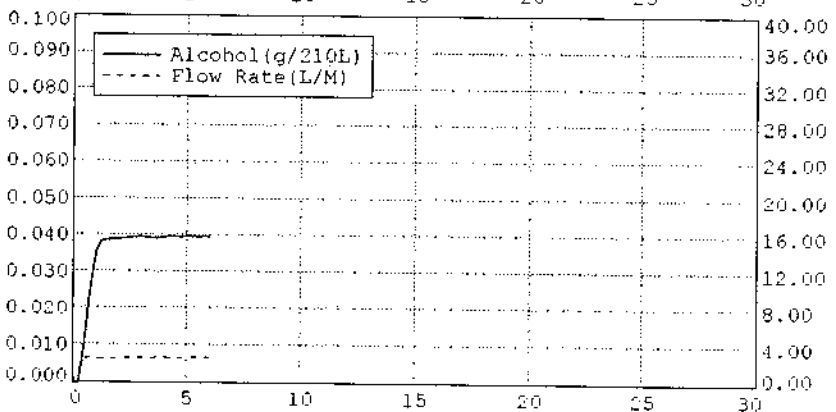
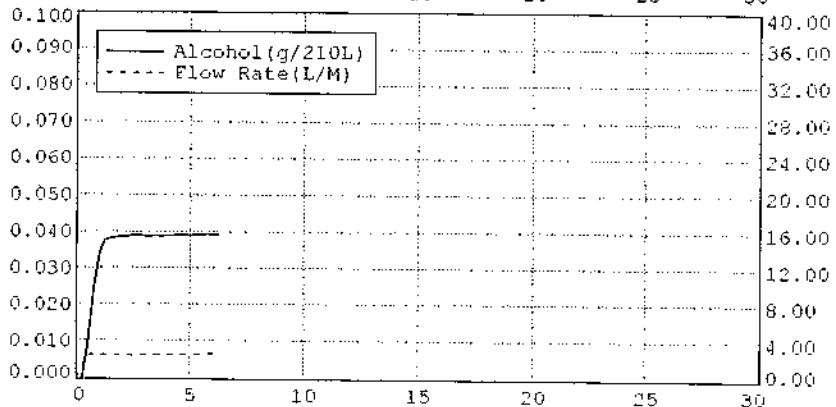
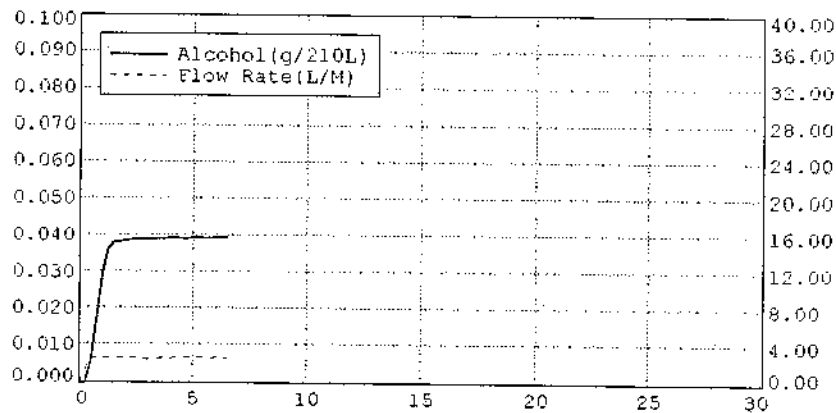
Date: 09/28/2016
 Time: 13:46:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 30.16: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 894 psi

BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.040	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.040	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.041	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.041	13:52
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.040	13:54
BLANK TEST	0.000	13:54

Average = 0.0404
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100400

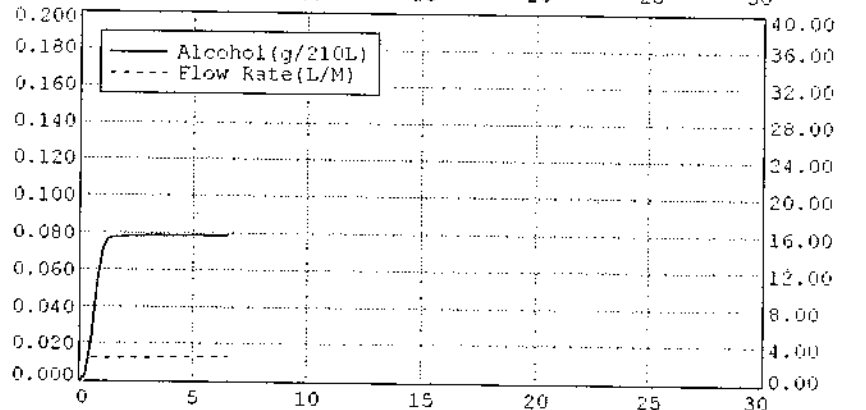
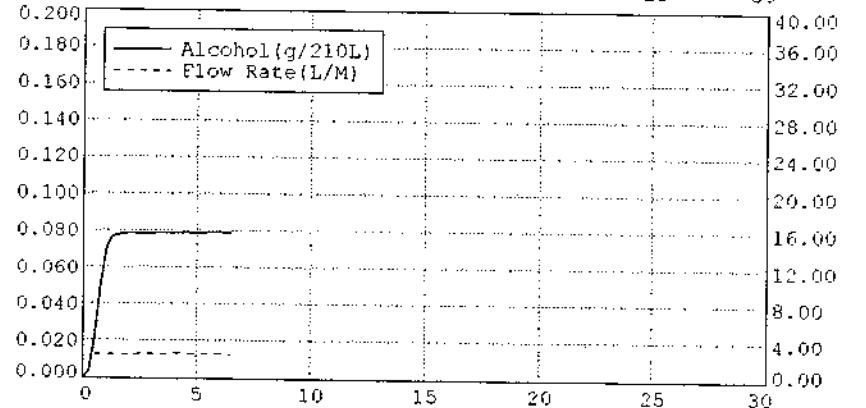
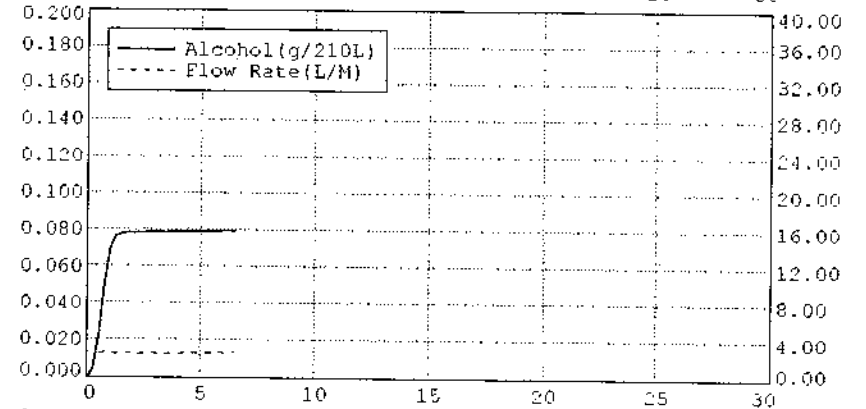
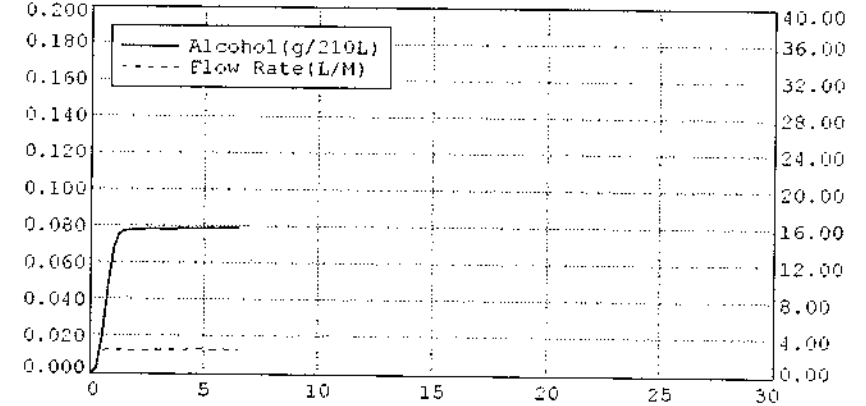
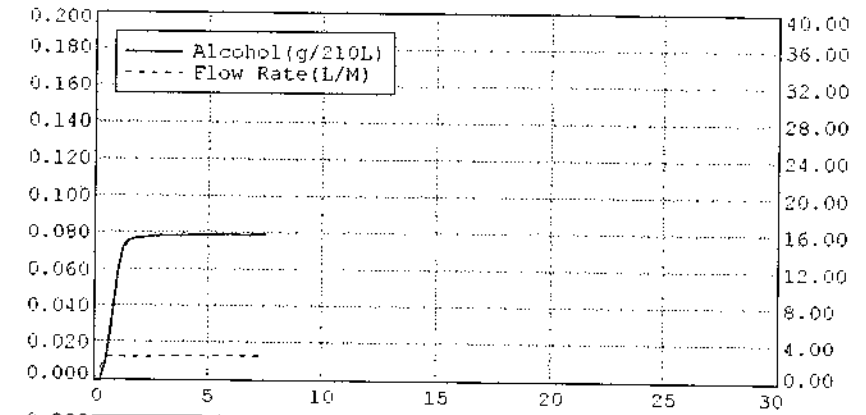
Date: 09/28/2016
 Time: 13:57:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 30.15: 0.081
 LOT #: AG608504
 EXPIRATION: 03/25/2018
 TANK PRESSURE: 774 psi

BLANK TEST	0.000	13:58
INTERNAL STANDARD	VERIFIED	13:58
EXTERNAL STANDARD	0.080	13:59
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.080	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.080	14:01
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.080	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.080	14:03
BLANK TEST	0.000	14:04

Average = 0.0800
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100400

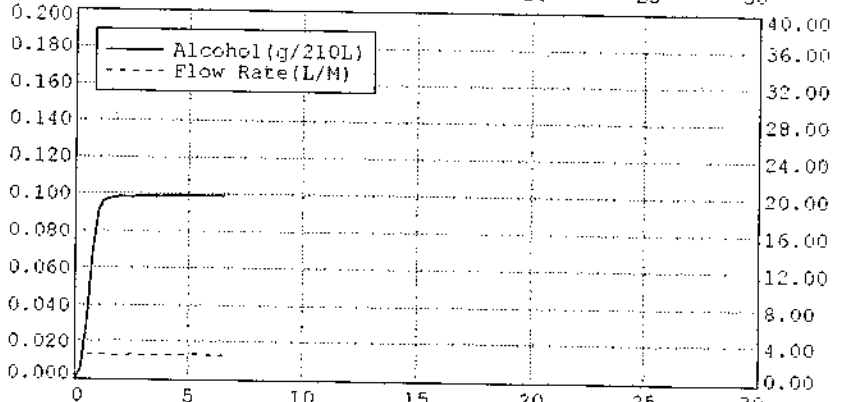
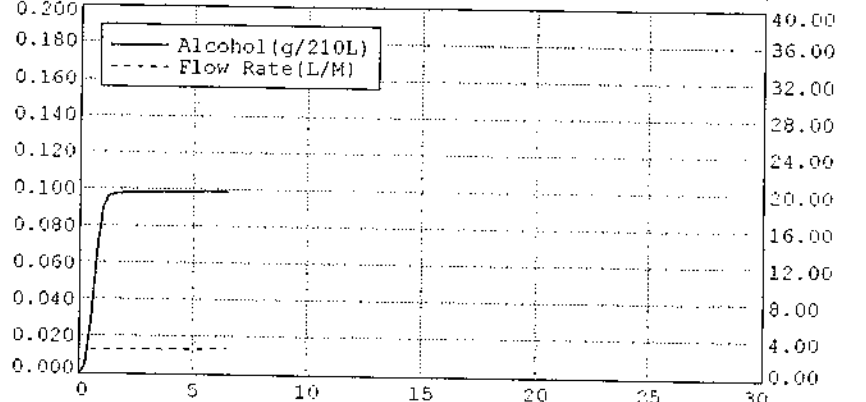
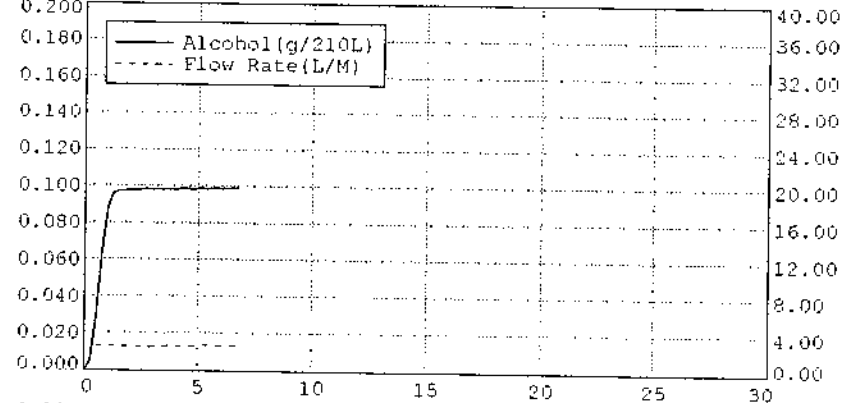
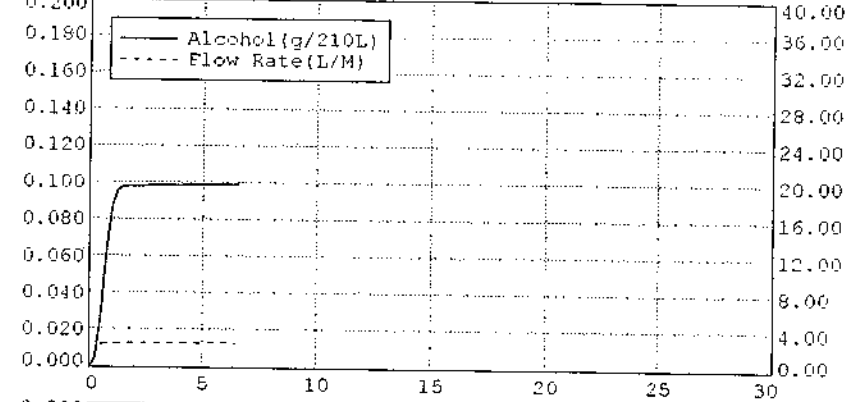
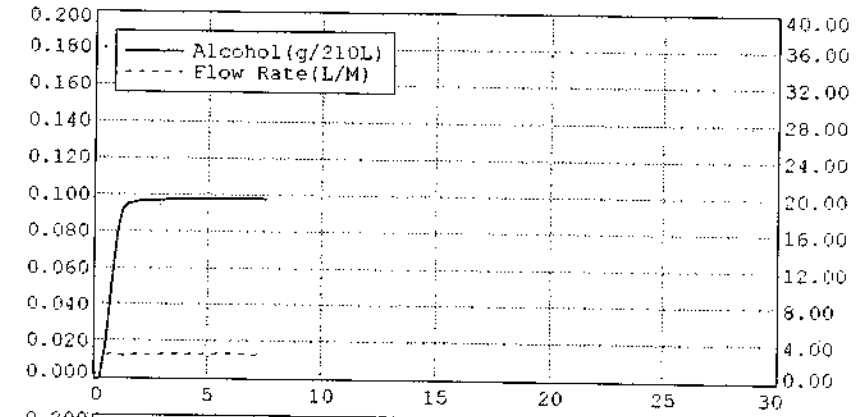
Date: 09/28/2016
 Time: 14:08:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 30.17: 0.101
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 986 psi

BLANK TEST	0.000	14:09
INTERNAL STANDARD	VERIFIED	14:10
EXTERNAL STANDARD	0.099	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.100	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.100	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.100	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.100	14:14
BLANK TEST	0.000	14:15

Average = 0.0998
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100400

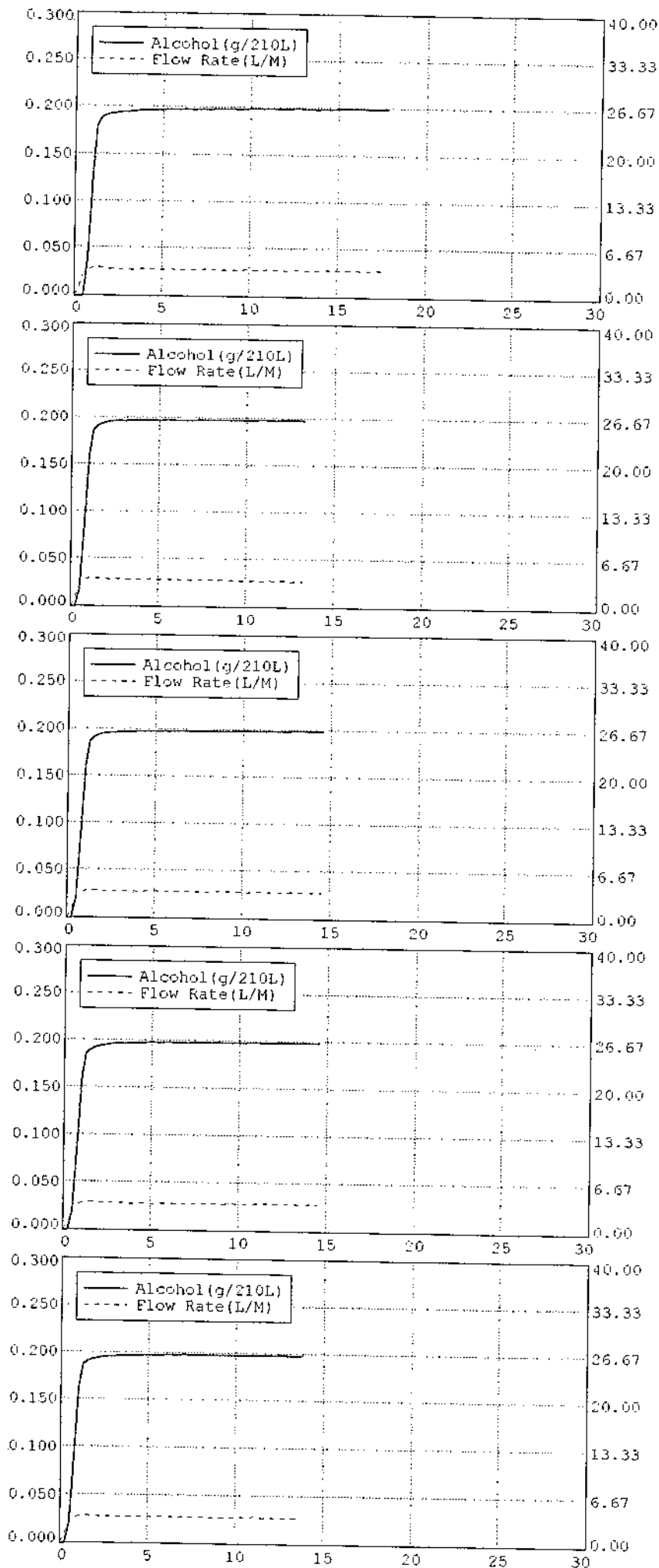
Date: 09/28/2016
 Time: 14:19:08

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:20
INTERNAL STANDARD	VERIFIED	14:20
EXTERNAL STANDARD	0.199	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.198	14:22
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.200	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.199	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.198	14:25
BLANK TEST	0.000	14:26

Average = 0.1988
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100400

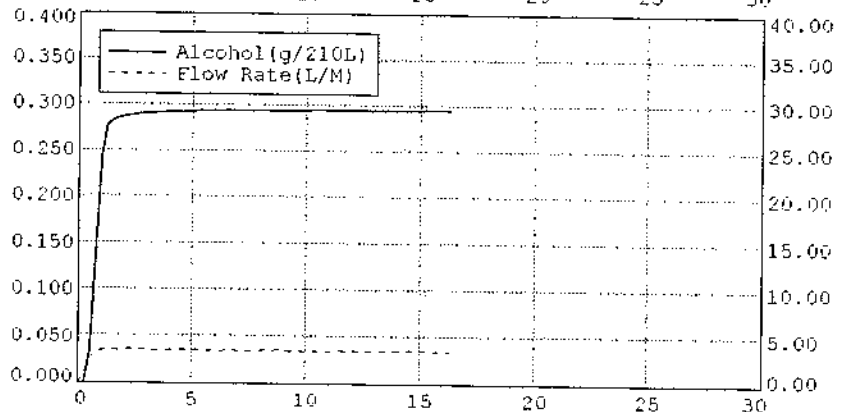
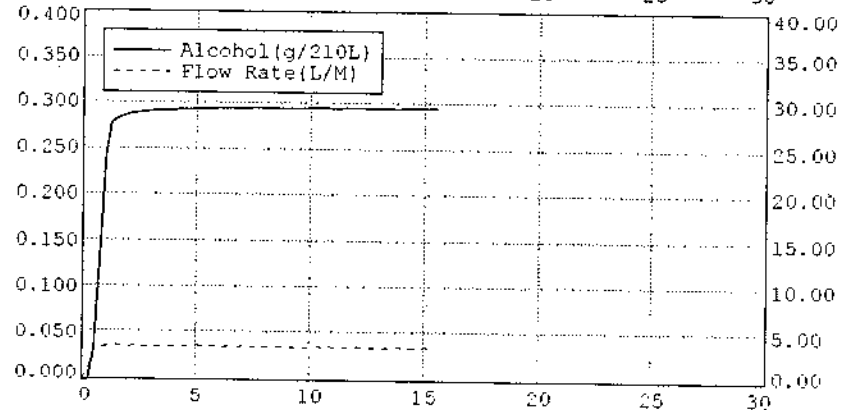
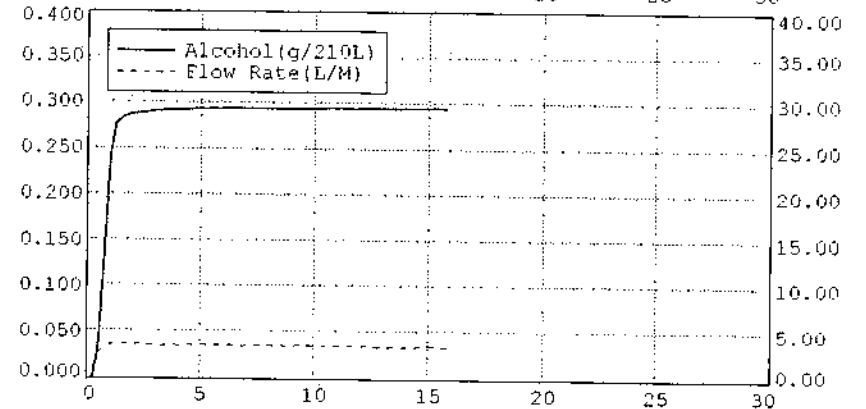
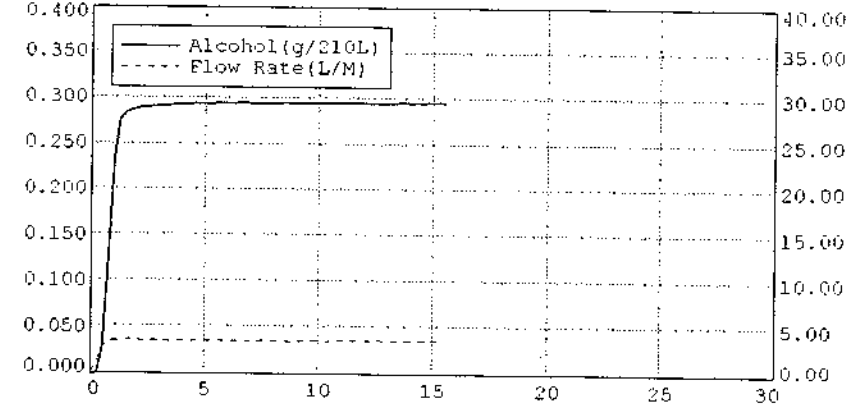
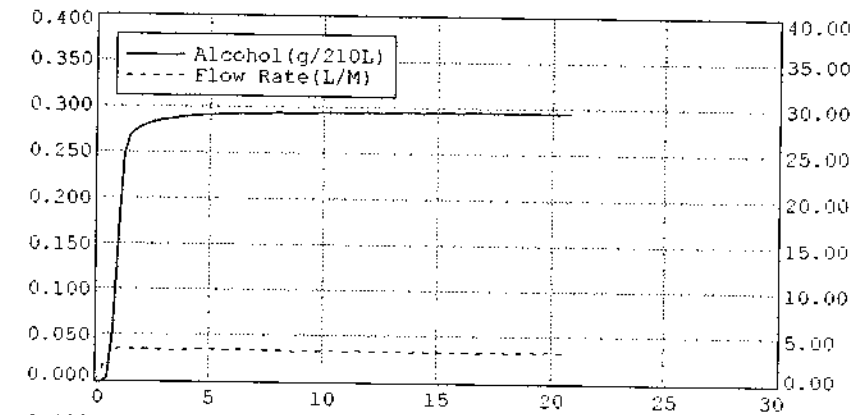
Date: 09/28/2016
 Time: 14:33:15

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:34
INTERNAL STANDARD	VERIFIED	14:34
EXTERNAL STANDARD	0.296	14:35
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.297	14:36
BLANK TEST	0.000	14:37
EXTERNAL STANDARD	0.296	14:37
BLANK TEST	0.000	14:38
EXTERNAL STANDARD	0.297	14:38
BLANK TEST	0.000	14:39
EXTERNAL STANDARD	0.297	14:40
BLANK TEST	0.000	14:41

Average = 0.2966
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/29/2016
Time: 09:48:20

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

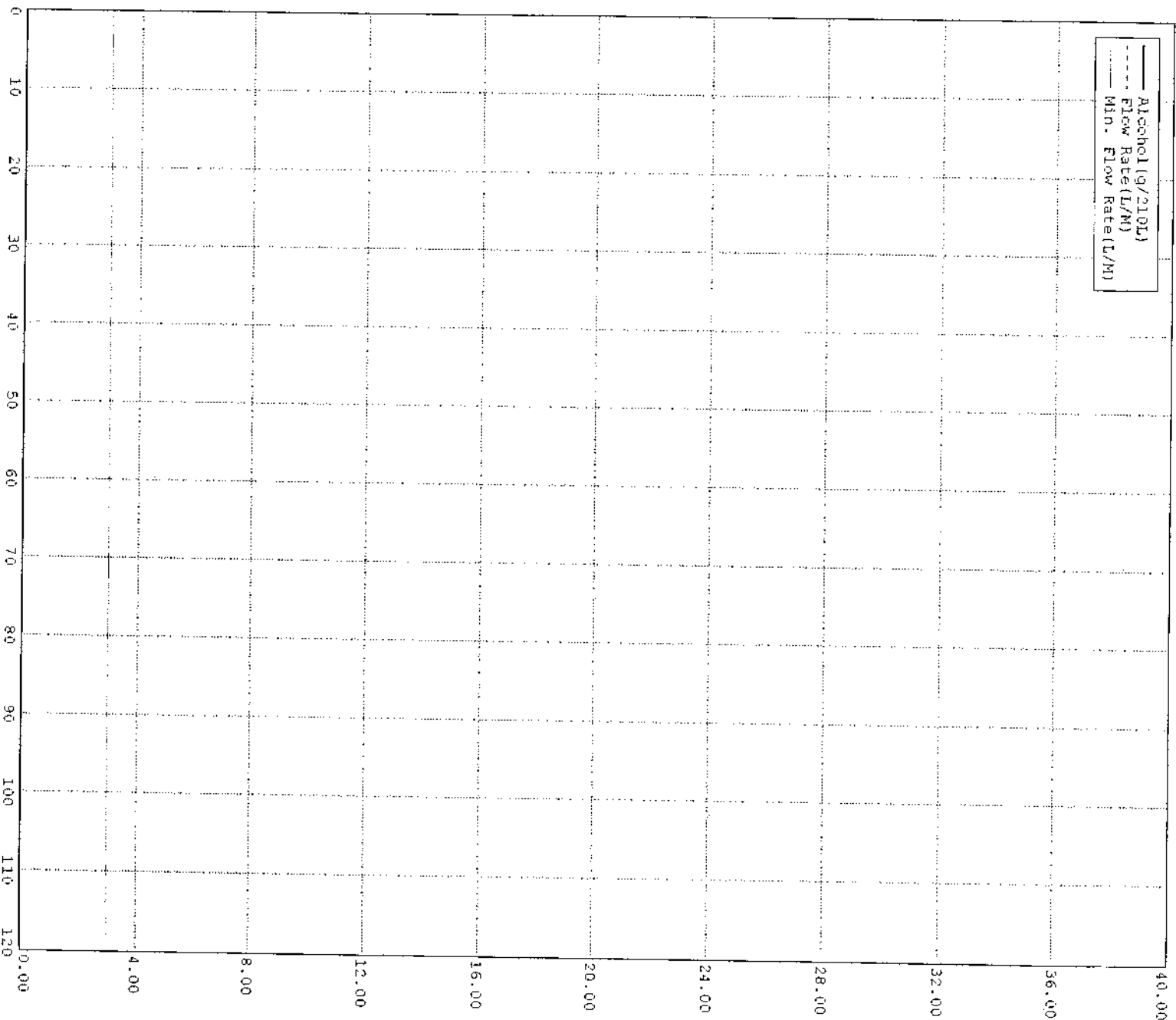
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.32: 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	0.080	09:50
BLANK TEST	0.000	09:51
SUBJECT SAMPLE	INCOMPLETE	09:53

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/29/2016
Time: 10:19:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

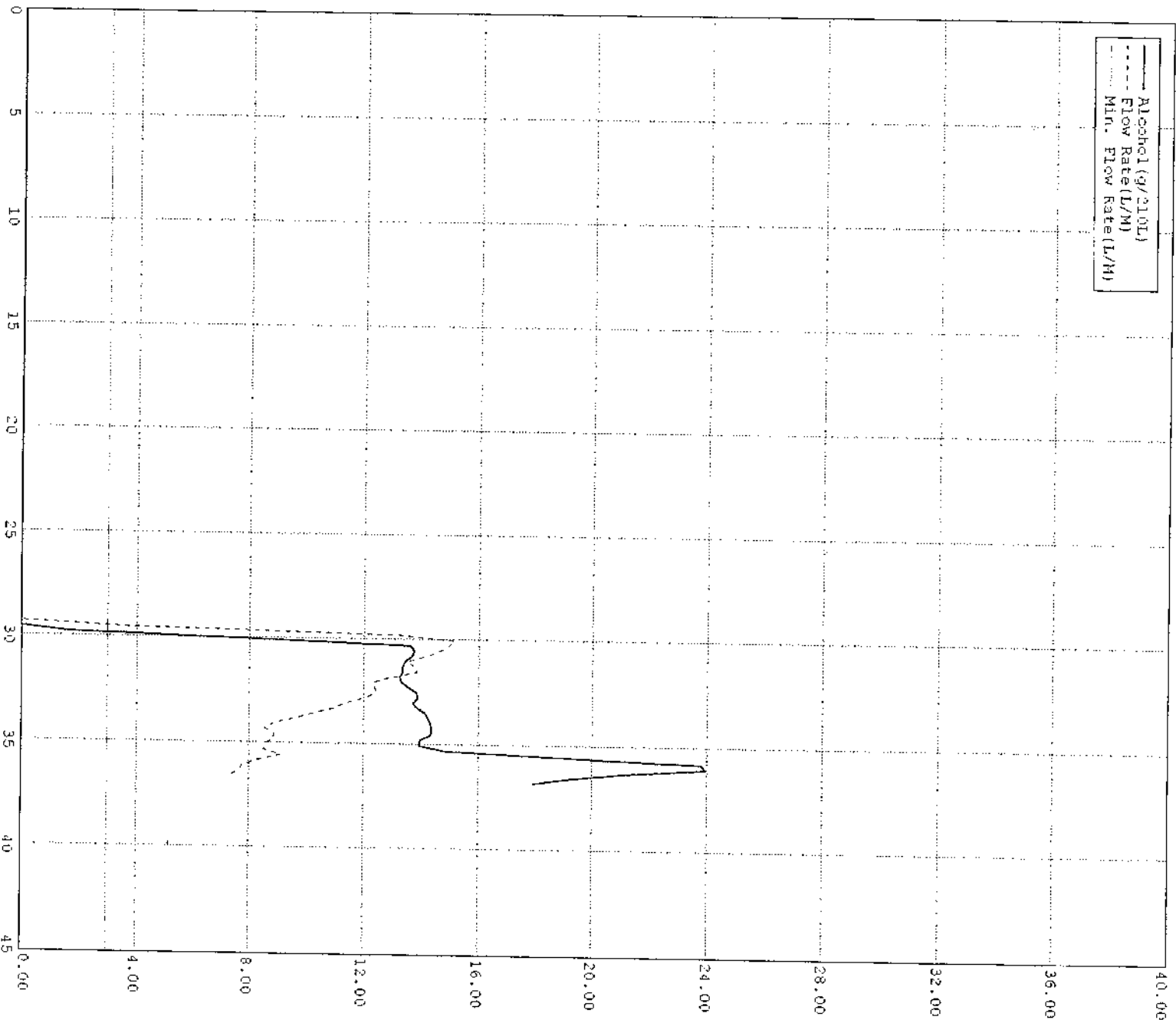
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.32: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	10:21
BLANK TEST	0.000	10:21
INTERNAL STANDARD	VERIFIED	10:22
EXTERNAL STANDARD	0.080	10:22
BLANK TEST	0.000	10:23
SUBJECT SAMPLE	INVALID	10:23

BM B



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/29/2016
Time: 12:36:41

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 30.34: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

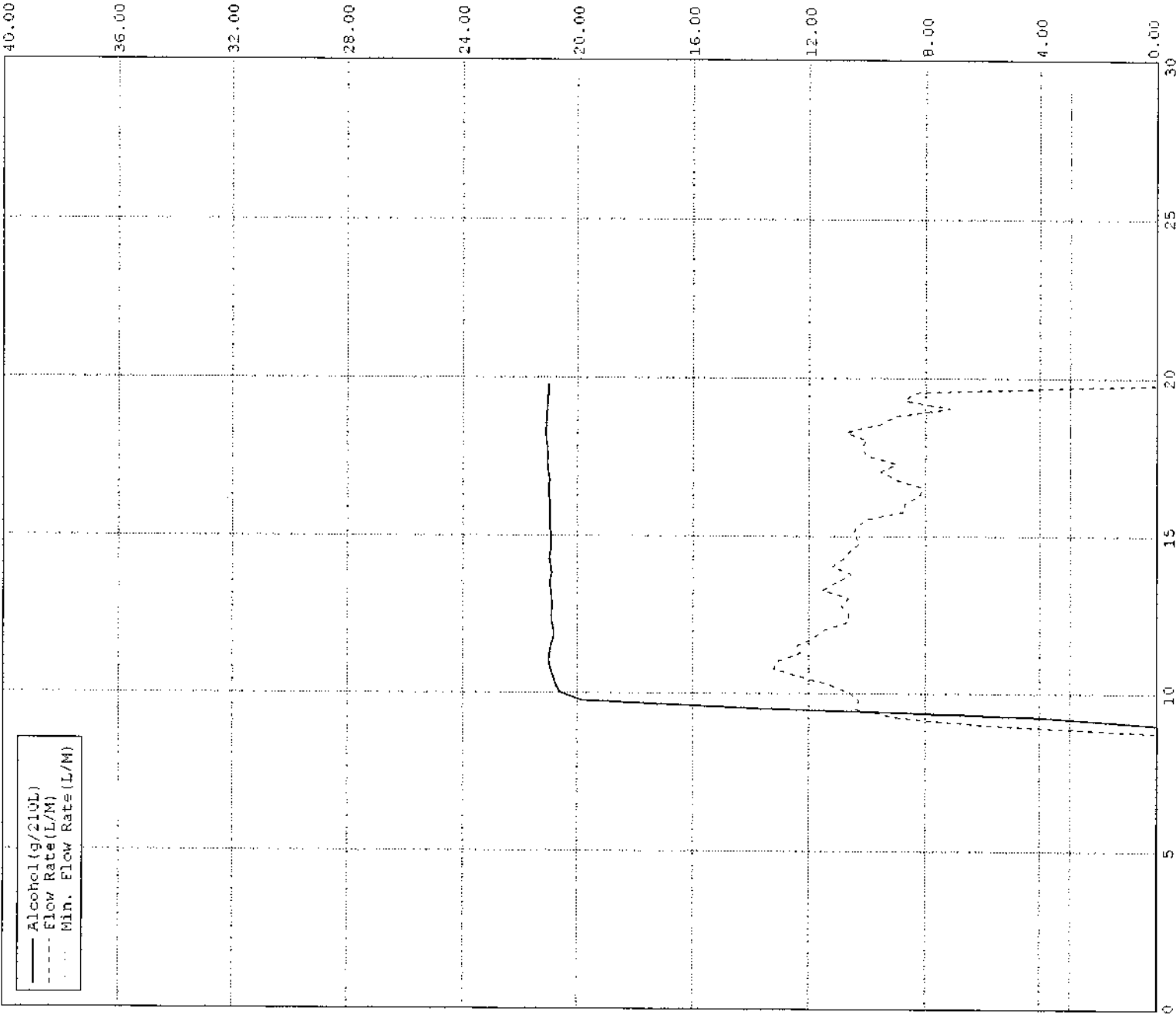
DIAGNOSTIC CHECK PASSED 12:37
BLANK TEST 0.000 12:38
INTERNAL STANDARD VERIFIED 12:38
Xg = 0.101 (1.41%)
EXTERNAL STANDARD 0.080 12:38
X[1] = 0.0805 (0.0012) (0.0031)
BLANK TEST 0.000 12:39
SUBJECT SAMPLE XXX 12:39
X[1] = 0.1061 (-0.0175) (-0.0001)

Interference Detected

Filter 2 Avg: 0.0012
Filter 3 Avg: 0.0023

BMB 9/30/16
9/29/16

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/29/2016
Time: 12:47:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

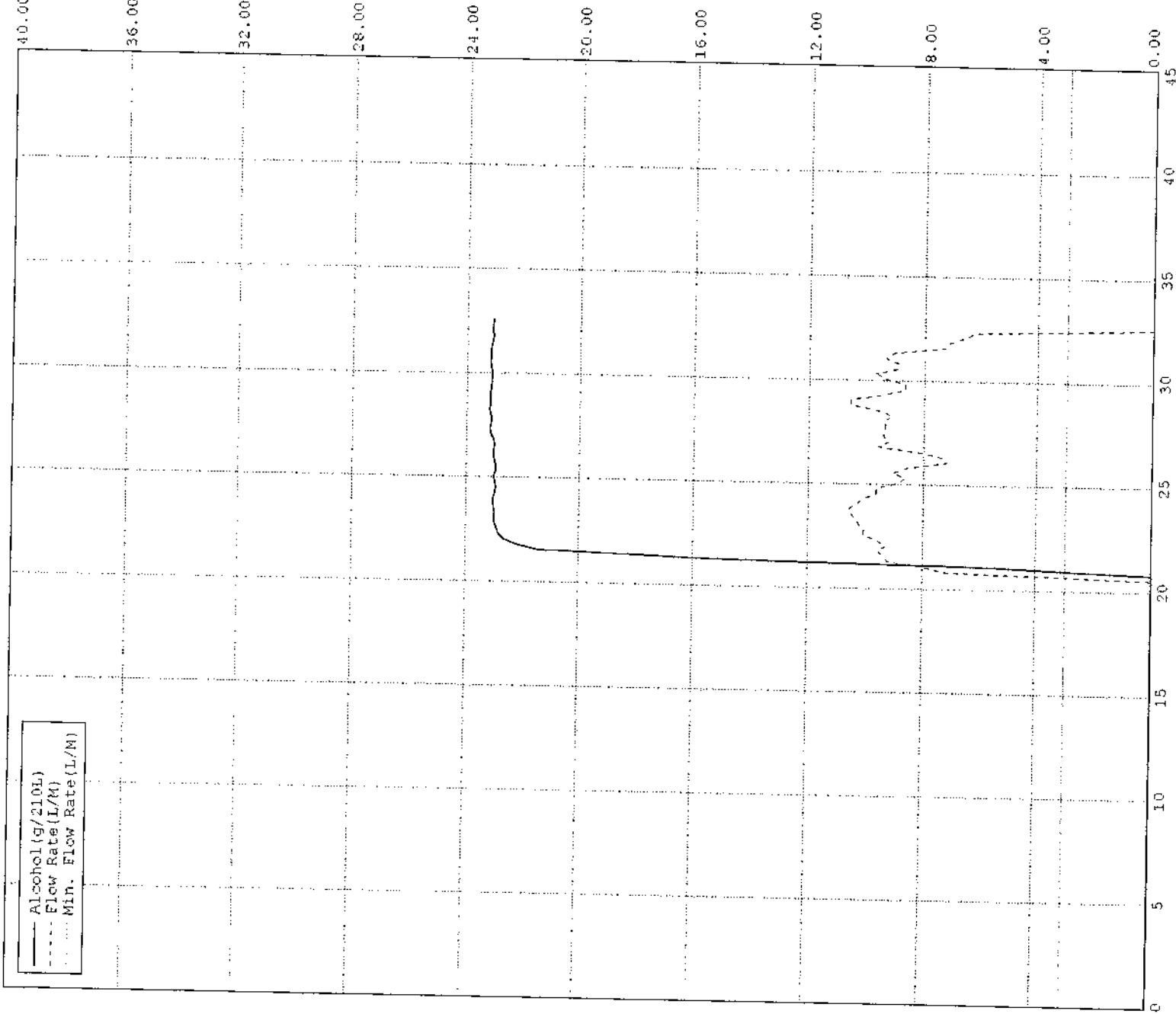
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.35: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 12:48
BLANK TEST 0.000 12:49
INTERNAL STANDARD VERIFIED 12:49
Xg = 0.102 (2.02%)
EXTERNAL STANDARD 0.081 12:49
X[1] = 0.0810 (0.0014) (0.0025)
BLANK TEST 0.000 12:50
SUBJECT SAMPLE XXX 12:50
X[1] = 0.1163 (-0.0227) (0.0009)

Interference Detected

BMB

Alcohol(g/21.0L)
Flow Rate(L/M)
Min. Flow Rate(L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/29/2016
Time: 12:52:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

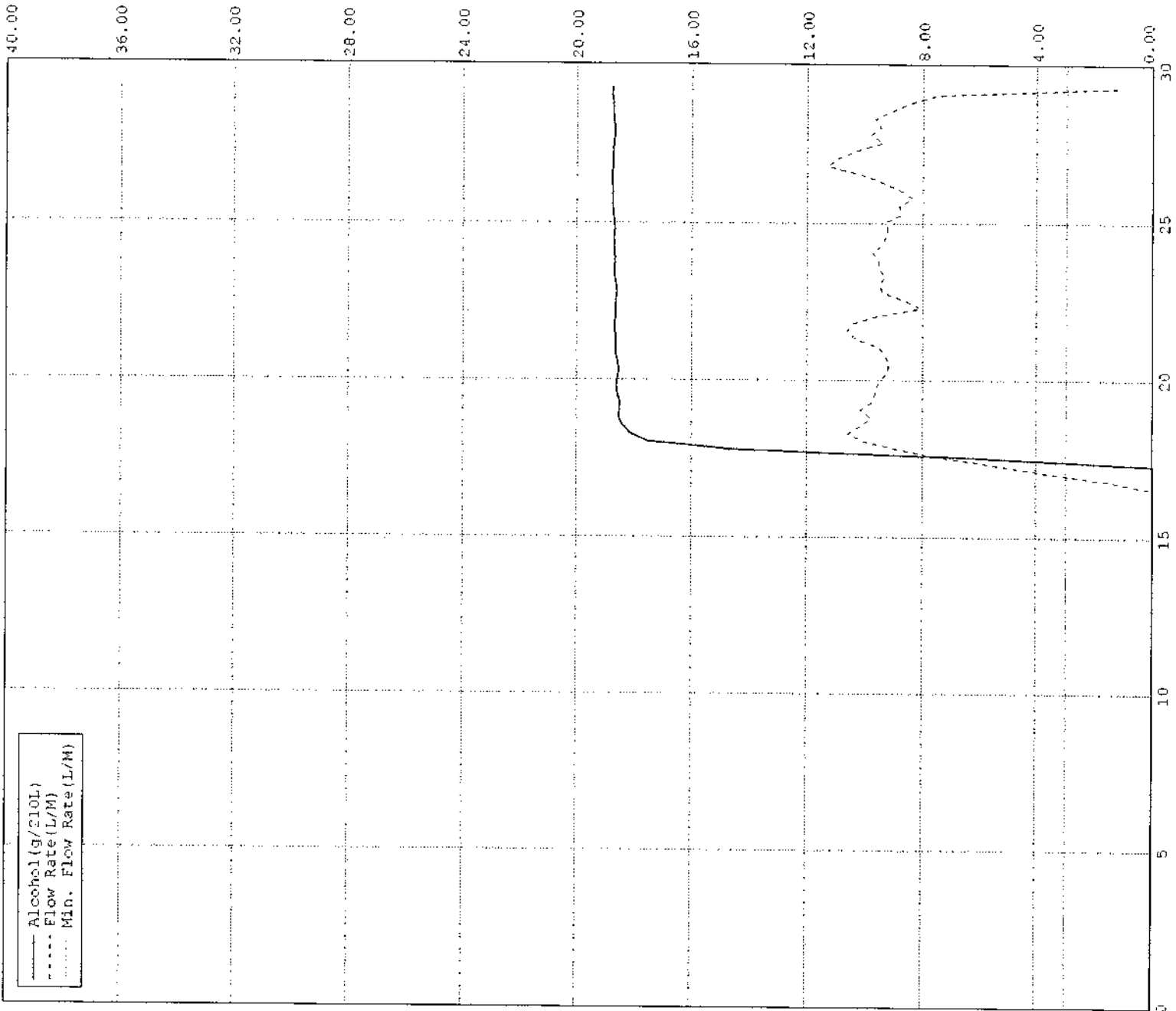
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.34: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	12:56
BLANK TEST	0.000	12:56
INTERNAL STANDARD	VERIFIED	12:56
Xq = 0.102 (1.93%)		
EXTERNAL STANDARD	0.081	12:56
X[1] = 0.0809 (0.0012) (0.0018)		
BLANK TEST	0.000	12:57
SUBJECT SAMPLE (Vol=1.90L)	0.094	12:58
X[1] = 0.0945 (-0.0004) (0.0002)		
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.080	12:59
X[1] = 0.0802 (0.0010) (0.0016)		
BLANK TEST	0.000	13:00



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/29/2016
Time: 10:45:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

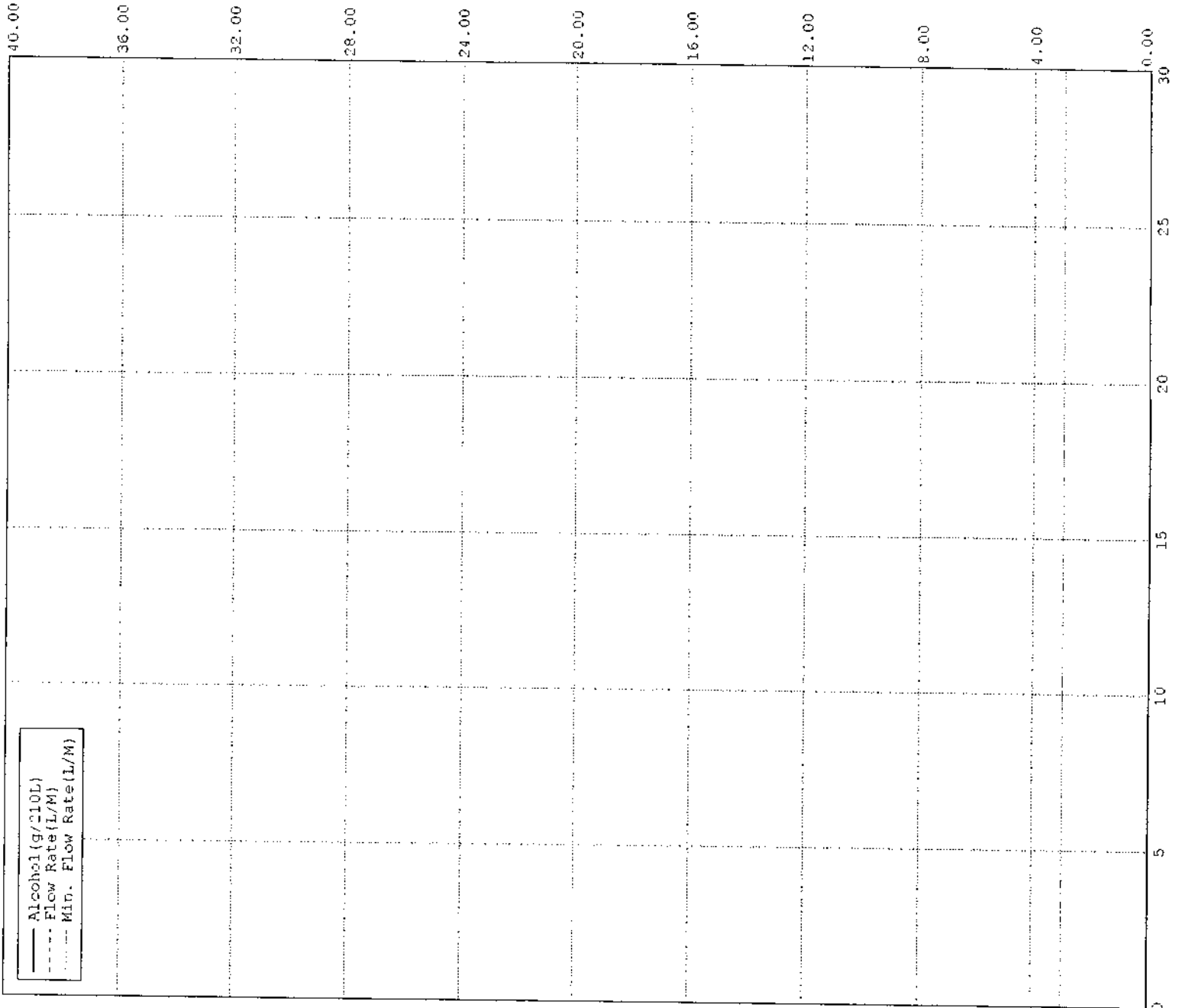
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.33: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 10:47
BLANK TEST 0.000 10:48
INTERNAL STANDARD VERIFIED 10:48
EXTERNAL STANDARD 0.080 10:48
BLANK TEST 0.000 10:49

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/29/2016
Time: 10:40:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

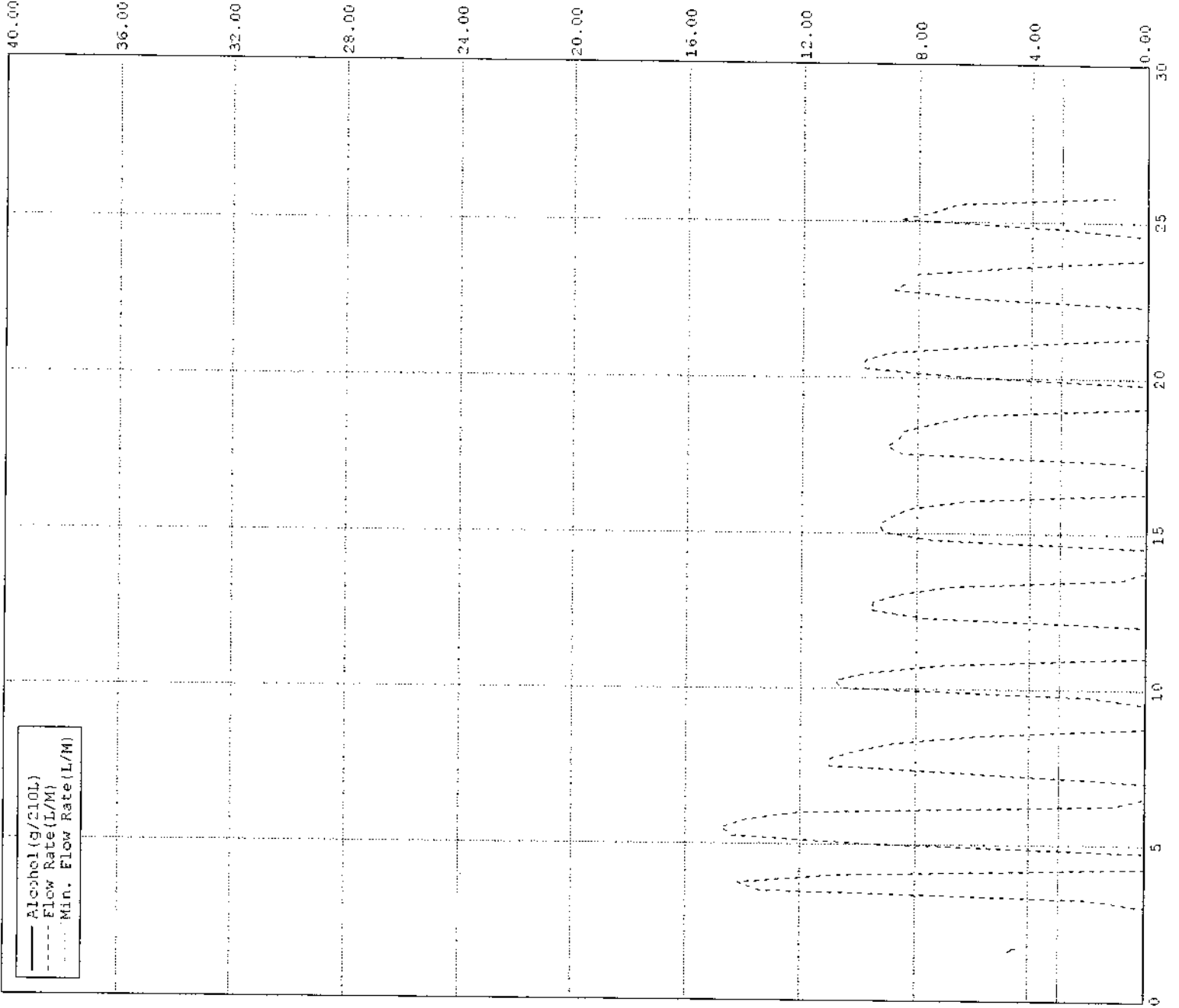
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.33: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 10:40
BLANK TEST 0.000 10:41
INTERNAL STANDARD VERIFIED 10:41
EXTERNAL STANDARD 0.080 10:41
BLANK TEST 0.000 10:42
SUBJECT SAMPLE XXX 10:42

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100400

Date: 09/29/2016
Time: 13:19:20

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 30.33: 0.081
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	TIME
BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:21
EXTERNAL STANDARD	0.081	13:21
BLANK TEST	0.000	13:22
SUBJECT SAMPLE (Vol=2.24L)	0.000	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.081	13:24
BLANK TEST	0.000	13:25

