

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 100360 Analyst Brandi Barnett Start Date 3/31/17

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)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG616504 Exp 6/13/18
- ii. 0.040g/210L Mnf Airgas Lot AG630101 Exp 10/27/18
- iii. 0.080g/210L Mnf Airgas Lot AG608504 Exp 3/25/18
- iv. 0.100g/210L Mnf Airgas Lot AG629304 Exp 10/19/18
- v. 0.200g/210L Mnf Guth Lot 1617090 Exp 2/24/19
 - I. Simulator S/N DR5298 Date Calibrated 9/14/16
- vi. 0.300g/210L Mnf Guth Lot 16410 Exp 12/19/18
 - I. Simulator S/N SD1177 Date Calibrated 9/13/16

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
 - I. Simulator S/N SD1199 Date Calibrated 9/13/16
- ii. Isopropanol - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17
 - I. Simulator S/N SD1088 Date Calibrated 9/13/16
- iii. Negative Control - Mnf Guth Lot 17060 Level 0.100 Exp 2/14/19
 - I. Simulator S/N DR4161 Date Calibrated 9/14/16

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 3/31/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 10:09:57

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 = 44.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.35 V PASSED
(1.36 V - 3.18 V)
Cooler Voltage = 2.01 V PASSED
(1.16 V - 2.70 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 550 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.633 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 = 0.116 0.85% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 10:20 AM

Temperatures (°C)

Sample Cell: 48.7°C
Breath Tube: 45.3°C

Current Barometer 29.0 in
Volume (Ltr) 1.49

Settings

Lamp: 2.40 V
Bias: 80 V
Cooler: 2.06 V
Chopper: 528 Hz

Voltages (V)

Flow: 1.06 V
Detector: -0.008 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 05/16/2013
Time: 07:33:53

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca	=	0.1000		
CAL	=	0.978988	0.800	<= CAL < 1.200
b1	=	0.0006	0.0000	<= b1 < 0.0040
b2	=	0.0071	0.0010	<= b2 < 0.0100
b3	=	0.0002	0.0000	<= b3 < 0.0040
Xq	=	0.1148	0.0500	<= Xq < 0.2000
a21	=	1.227049	1.050	<= a21 < 1.300
a31	=	0.511803	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 12:02:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

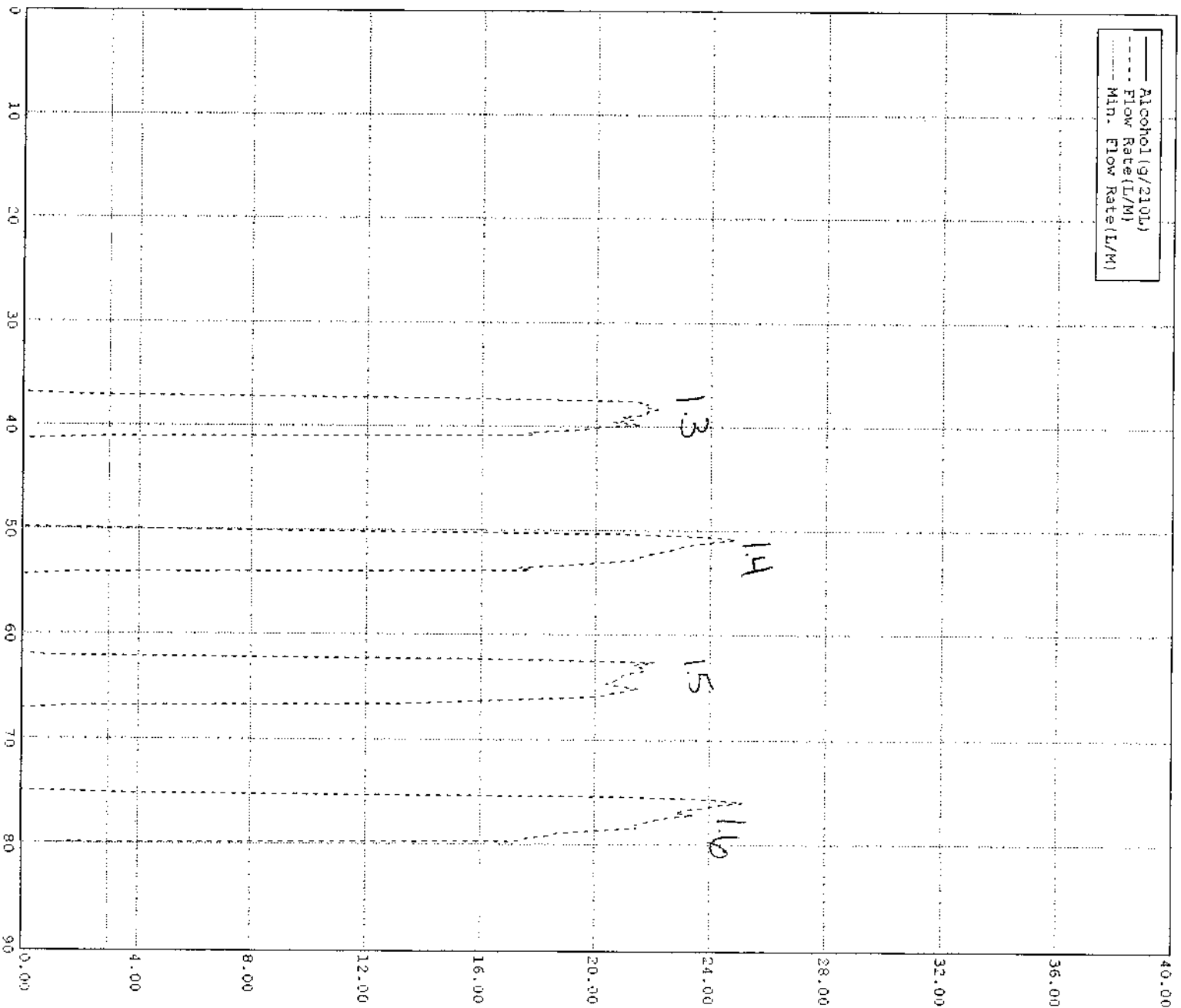
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 28.99: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	12:03
BLANK TEST	0.000	12:03
INTERNAL STANDARD	VERIFIED	12:03
EXTERNAL STANDARD	0.077	12:03
BLANK TEST	0.000	12:04
SUBJECT SAMPLE (Vol=1.64L)	0.000	12:06
BLANK TEST	0.000	12:07
EXTERNAL STANDARD	0.077	12:07
BLANK TEST	0.000	12:08

BMB



LINEARITY CHECK

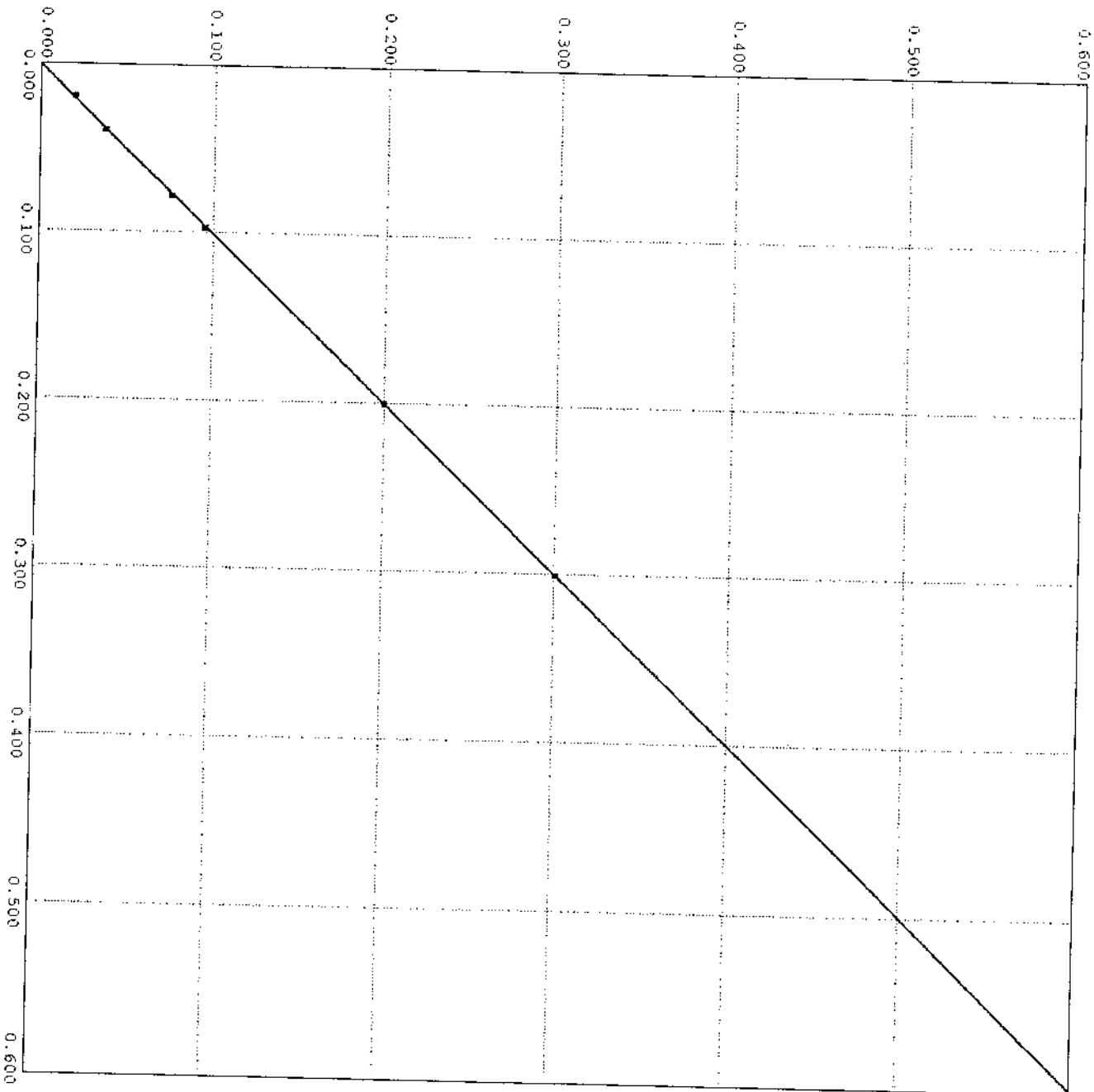
Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 12:19:08

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0204	0.0005
0.039	0.0386	0.0005
0.078	0.0770	0.0000
0.097	0.0964	0.0005
0.200	0.2008	0.0008
0.300	0.3014	0.0005

SLOPE = 1.004485
R² = 0.999923



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LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100360

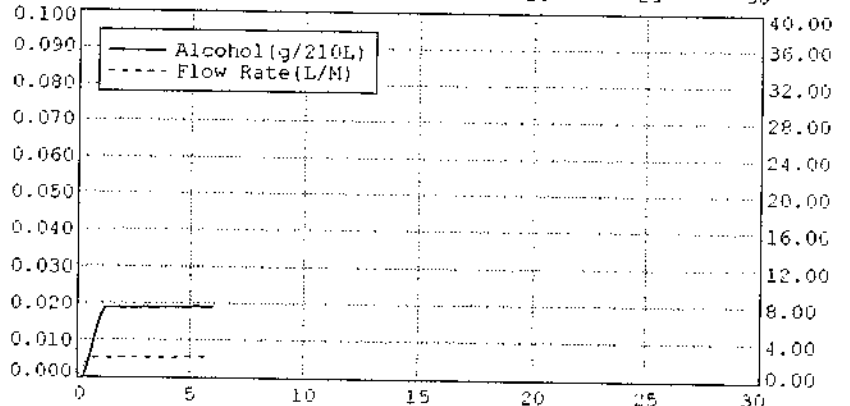
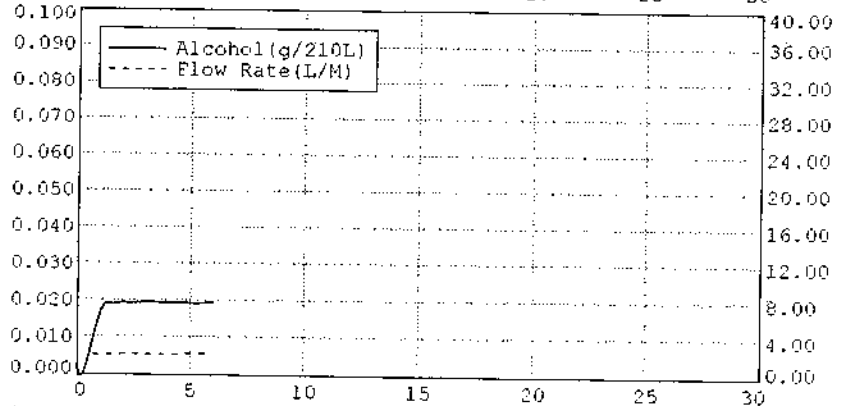
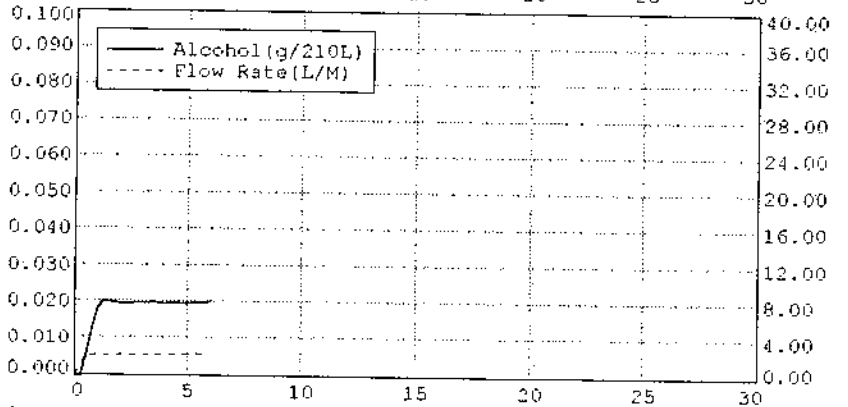
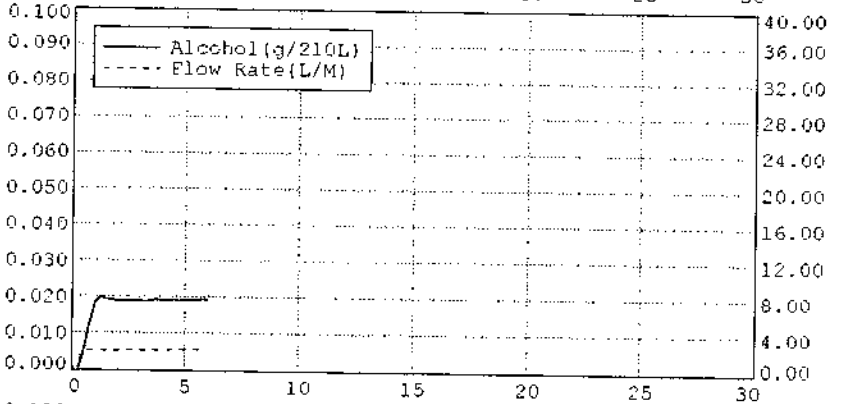
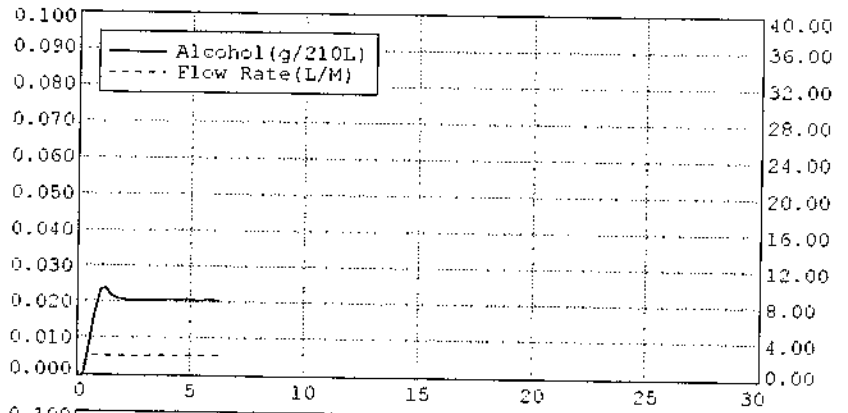
Date: 03/31/2017
 Time: 12:19:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.00: 0.019
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 958 psi

BLANK TEST	0.000	12:20
INTERNAL STANDARD	VERIFIED	12:20
EXTERNAL STANDARD	0.021	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.020	12:21
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.021	12:23
BLANK TEST	0.000	12:23
EXTERNAL STANDARD	0.020	12:24
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.020	12:25
BLANK TEST	0.000	12:26

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100360

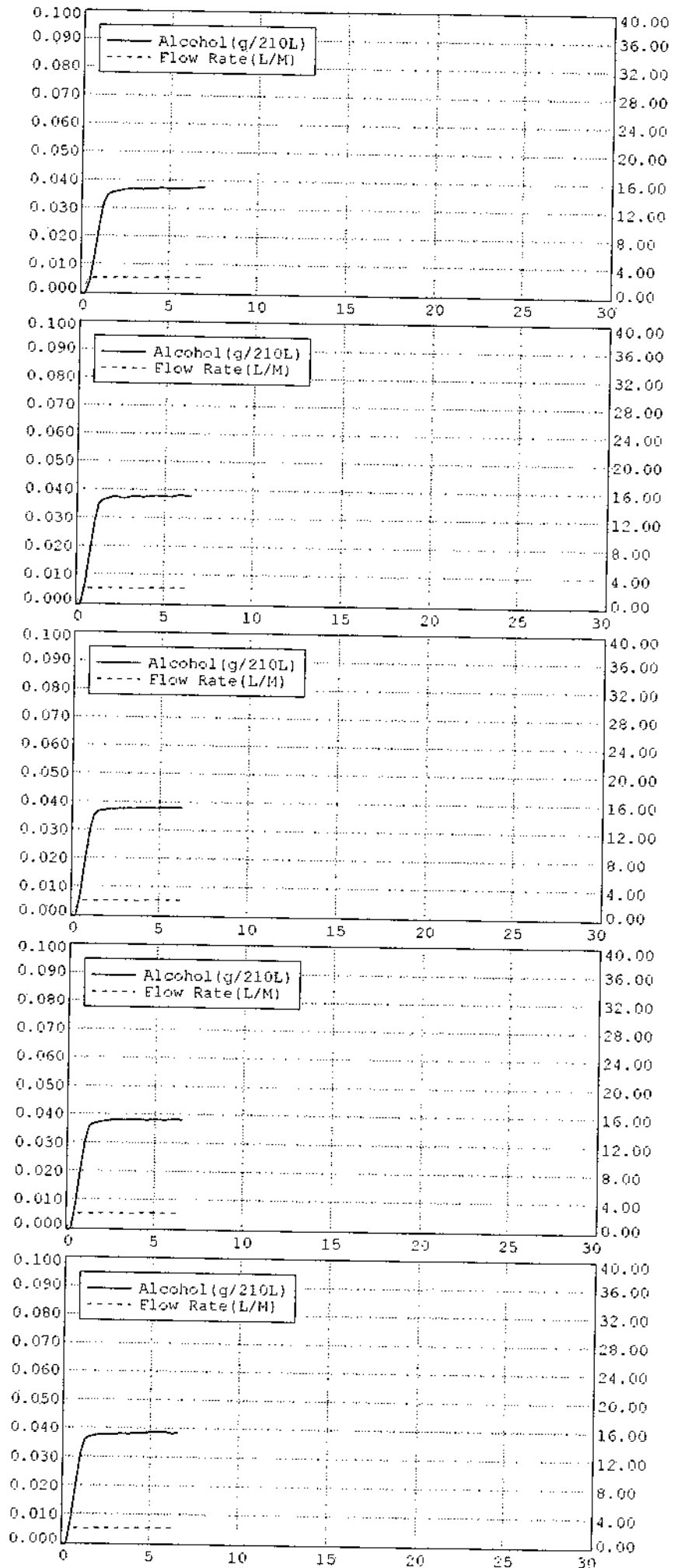
Date: 03/31/2017
 Time: 12:28:24

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.00: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 956 psi

BLANK TEST	0.000	12:29
INTERNAL STANDARD	VERIFIED	12:29
EXTERNAL STANDARD	0.038	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.039	12:30
BLANK TEST	0.000	12:31
EXTERNAL STANDARD	0.038	12:32
BLANK TEST	0.000	12:32
EXTERNAL STANDARD	0.039	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.039	12:34
BLANK TEST	0.000	12:35

Average = 0.0386
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100360

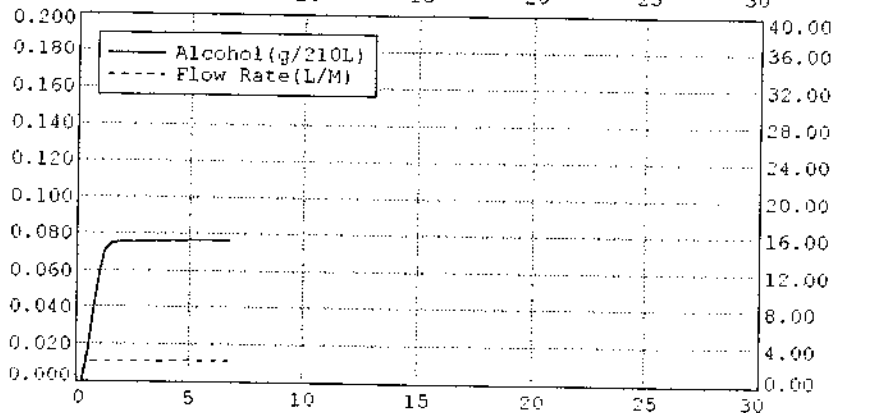
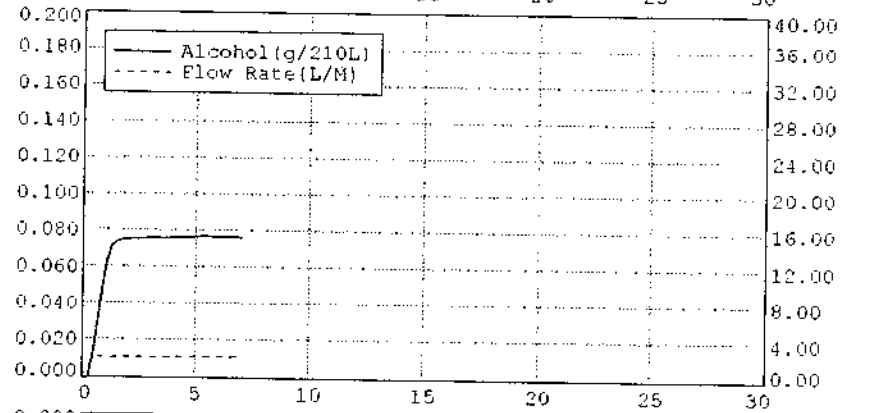
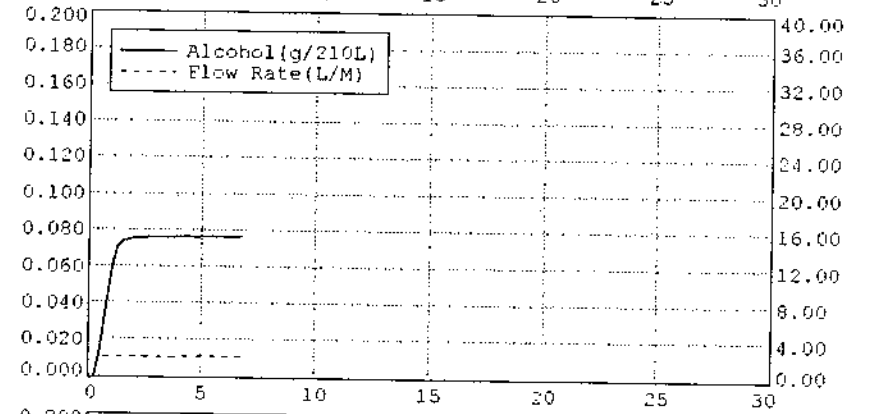
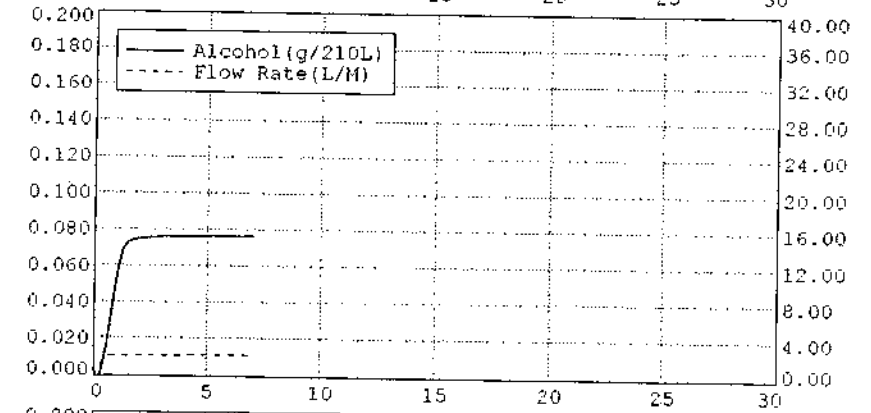
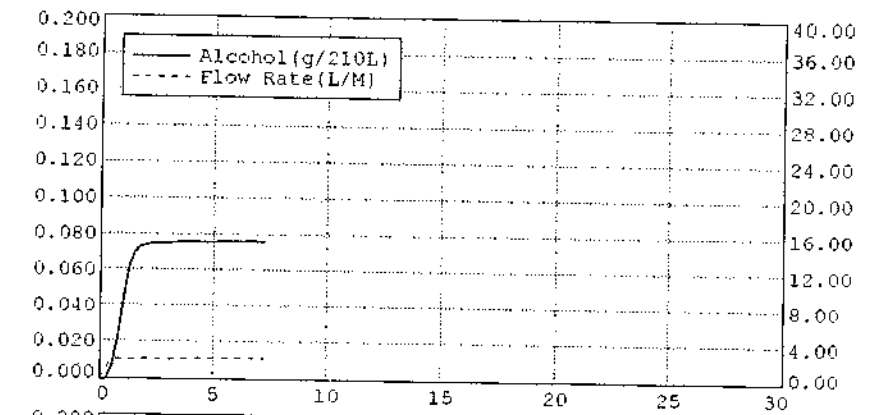
Date: 03/31/2017
 Time: 12:39:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.00: 0.078
 LOT #: AG608504
 EXPIRATION: 03/25/2018
 TANK PRESSURE: 946 psi

BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:41
EXTERNAL STANDARD	0.077	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.077	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.077	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.077	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.077	12:45
BLANK TEST	0.000	12:46

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100360

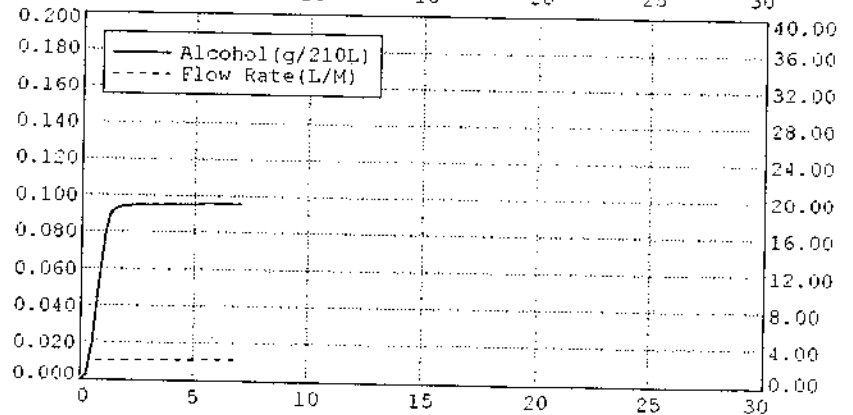
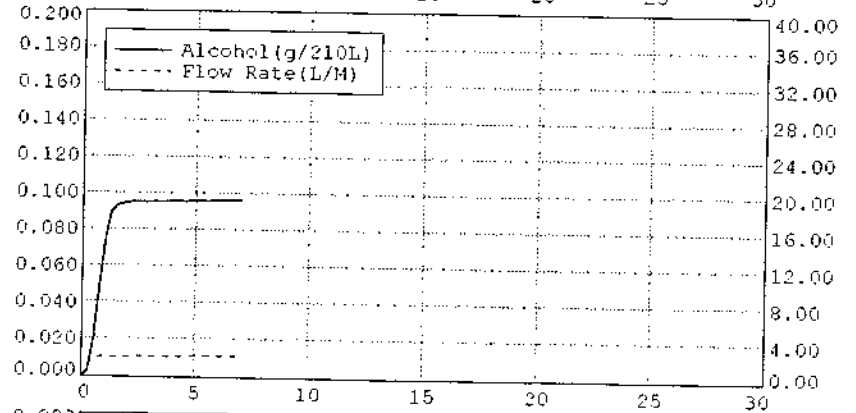
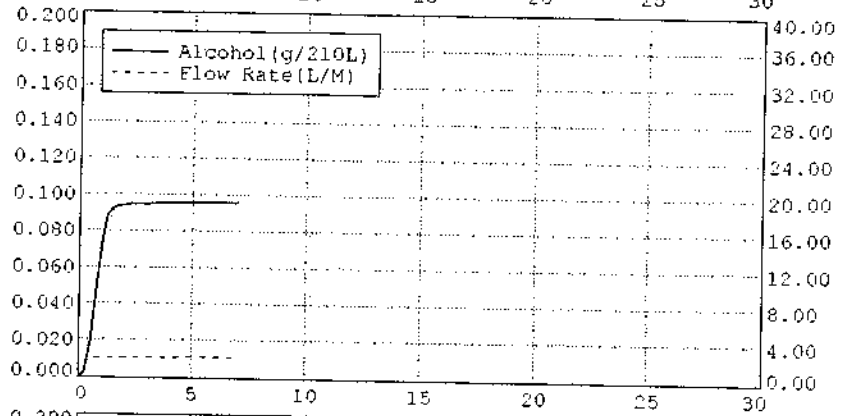
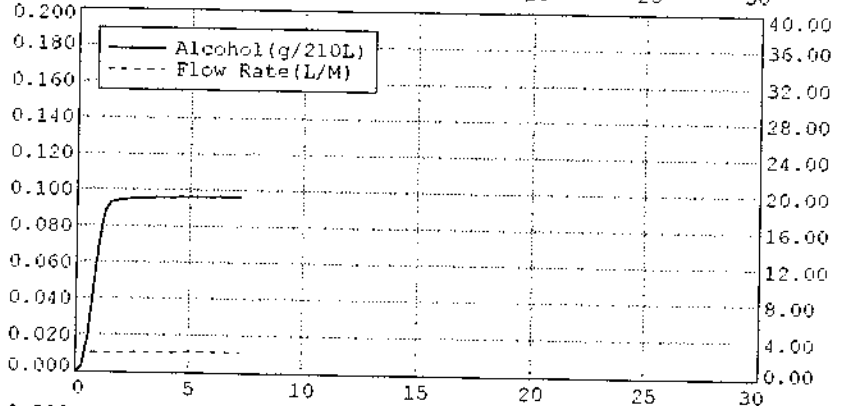
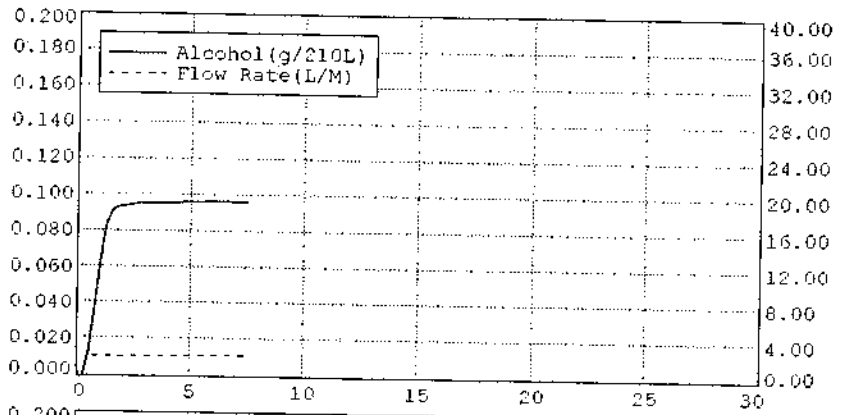
Date: 03/31/2017
 Time: 12:48:15

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.00: 0.097
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 904 psi

BLANK TEST	0.000	12:49
INTERNAL STANDARD	VERIFIED	12:49
EXTERNAL STANDARD	0.097	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.097	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.096	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.096	12:53
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.096	12:54
BLANK TEST	0.000	12:55

Average = 0.0964
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100360

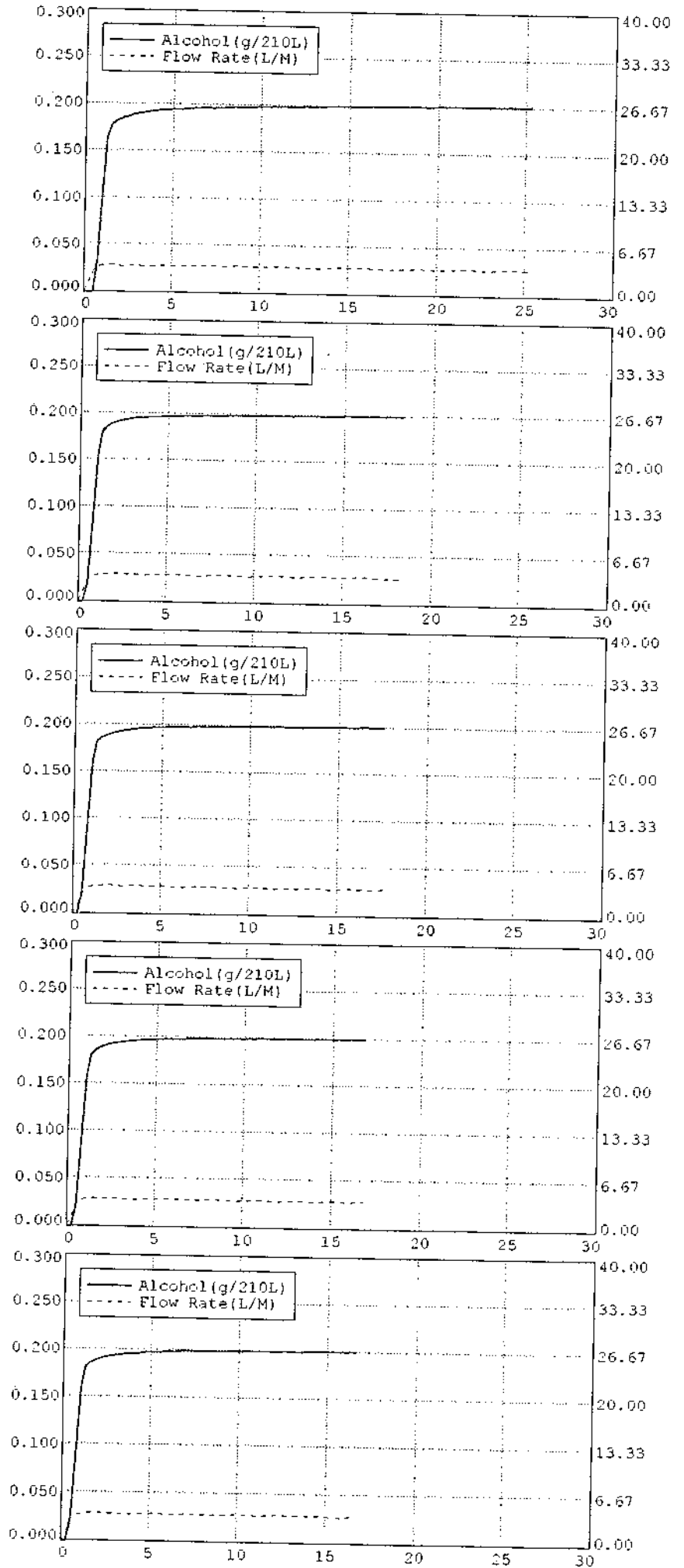
Date: 03/31/2017
 Time: 12:57:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: GUTH 17090
 EXPIRATION: 02/24/2019

BLANK TEST	0.000	12:58
INTERNAL STANDARD	VERIFIED	12:58
EXTERNAL STANDARD	0.202	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.200	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.200	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.201	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.201	13:04
BLANK TEST	0.000	13:05

Average = 0.2008
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

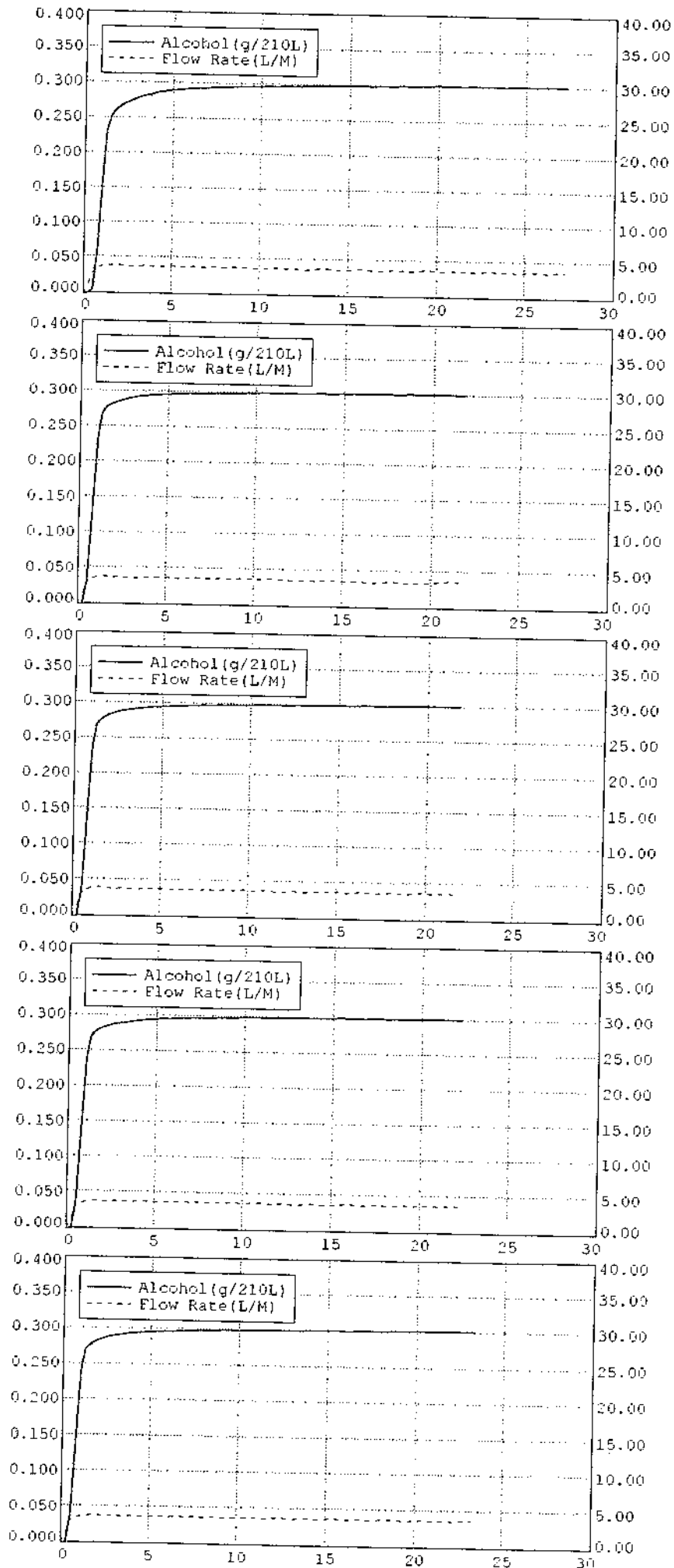
Alaska Department of Public Safety
 DATAMASTER dmt: 100360

Date: 03/31/2017
 Time: 13:09:14

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: GUTH 16410
 EXPIRATION: 12/19/2018

BLANK TEST	0.000	13:10
INTERNAL STANDARD	VERIFIED	13:10
EXTERNAL STANDARD	0.302	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.301	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.301	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.301	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.302	13:16
BLANK TEST	0.000	13:17

Average = 0.3014
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 13:28:17

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

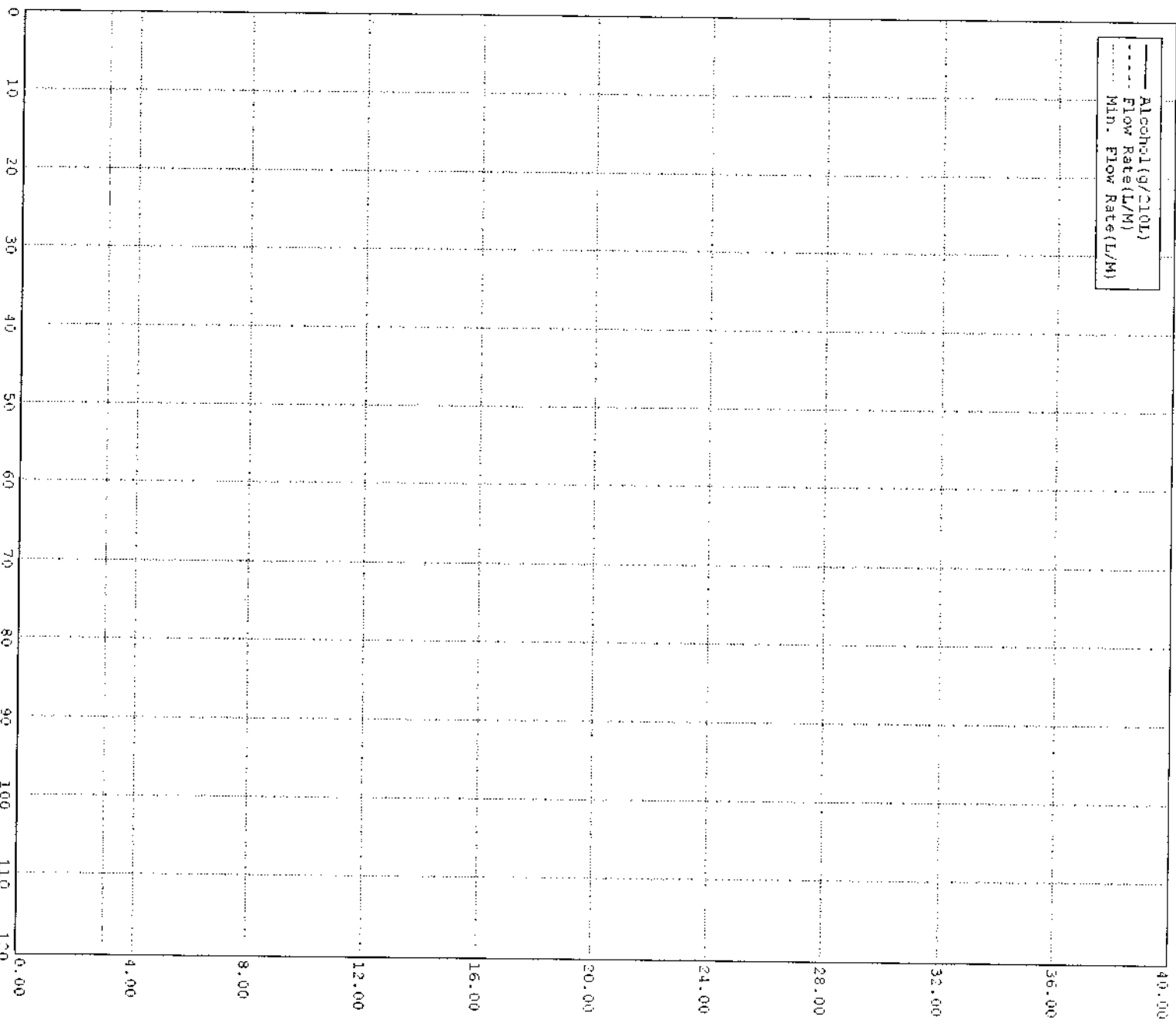
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	13:29
BLANK TEST	0.000	13:29
INTERNAL STANDARD	VERIFIED	13:29
EXTERNAL STANDARD	0.077	13:29
BLANK TEST	0.000	13:30
SUBJECT SAMPLE	INCOMPLETE	13:32

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100360

Date: 03/31/2017
Time: 14:10:39

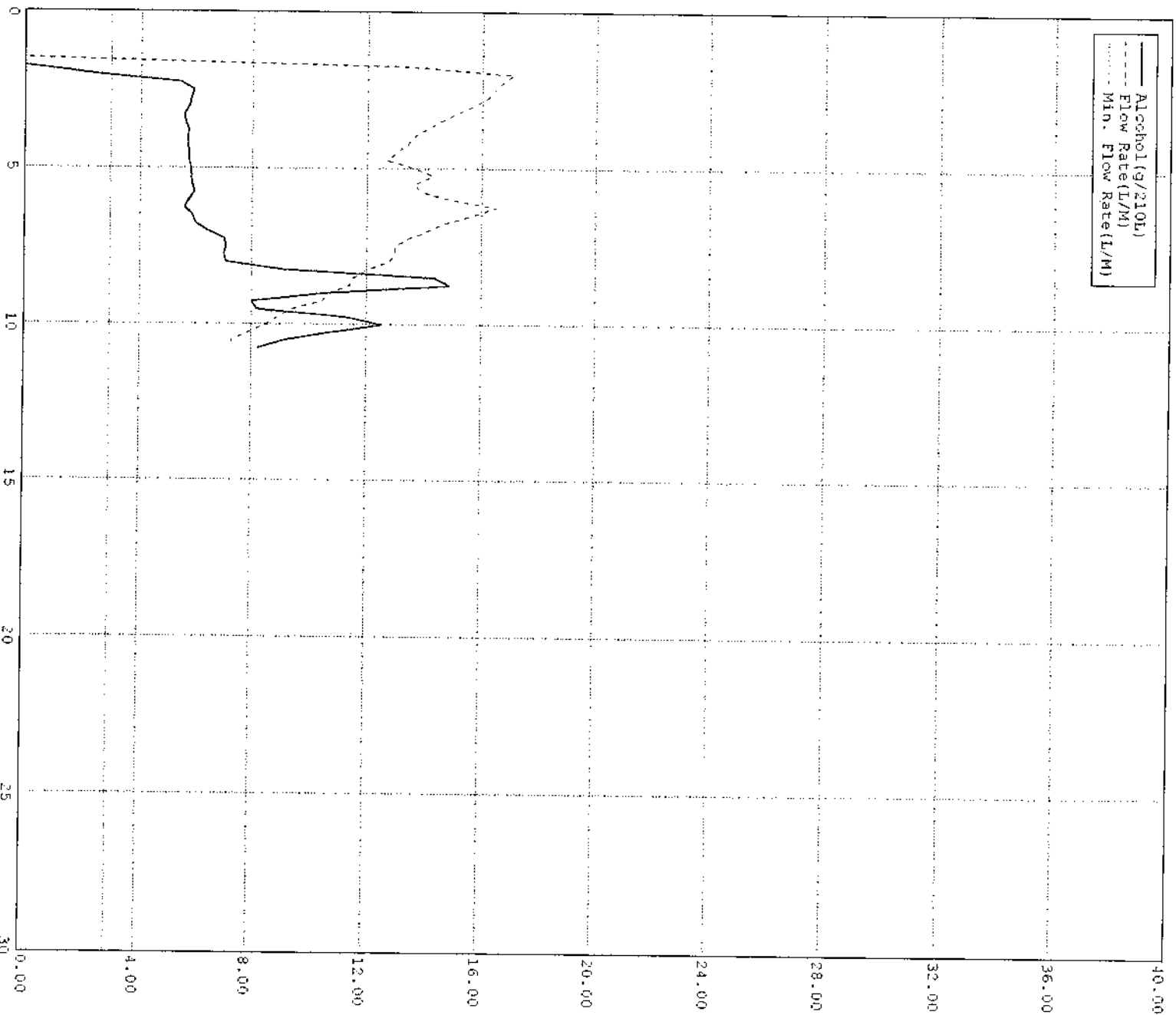
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	14:11
BLANK TEST	0.000	14:11
INTERNAL STANDARD	0.077	14:12
EXTERNAL STANDARD	0.000	14:13
BLANK TEST	0.000	14:13
SUBJECT SAMPLE	INVALID	14:13



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 13:39:27

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

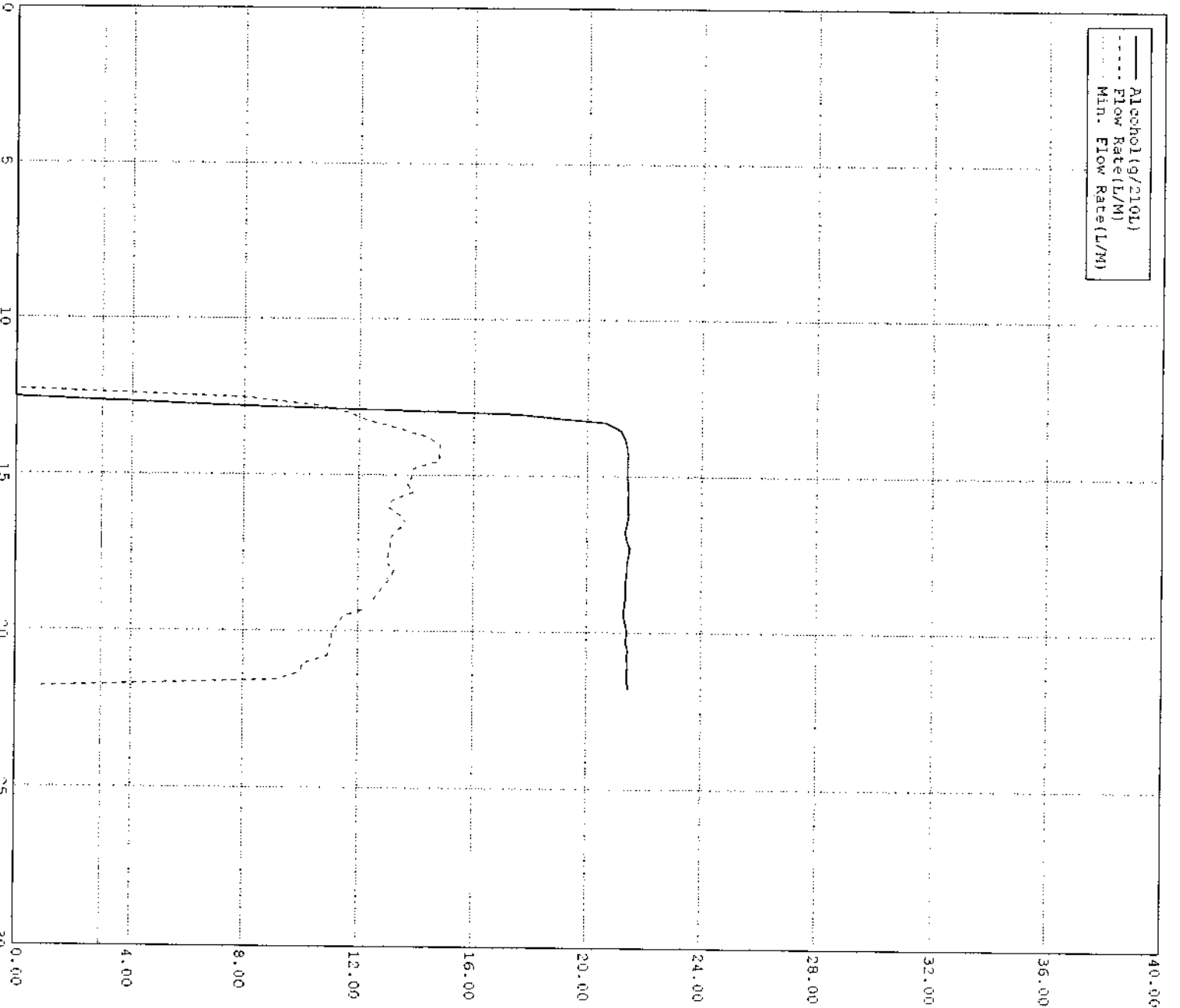
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:40
BLANK TEST	0.000	13:40
INTERNAL STANDARD	VERIFIED	13:40
Xq = 0.117 (1.85%)		
EXTERNAL STANDARD	0.078	13:40
X[1] = 0.0777 (-0.0004)	(0.0033)	
BLANK TEST	0.000	13:41
SUBJECT SAMPLE	XXX	13:42
X[1] = 0.1080 (-0.0143)	(0.0027)	

Interference Detected

Filter 2 Avg: 0.0002
Filter 3 Avg: 0.0038
BMB 3/31/17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 13:44:44

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

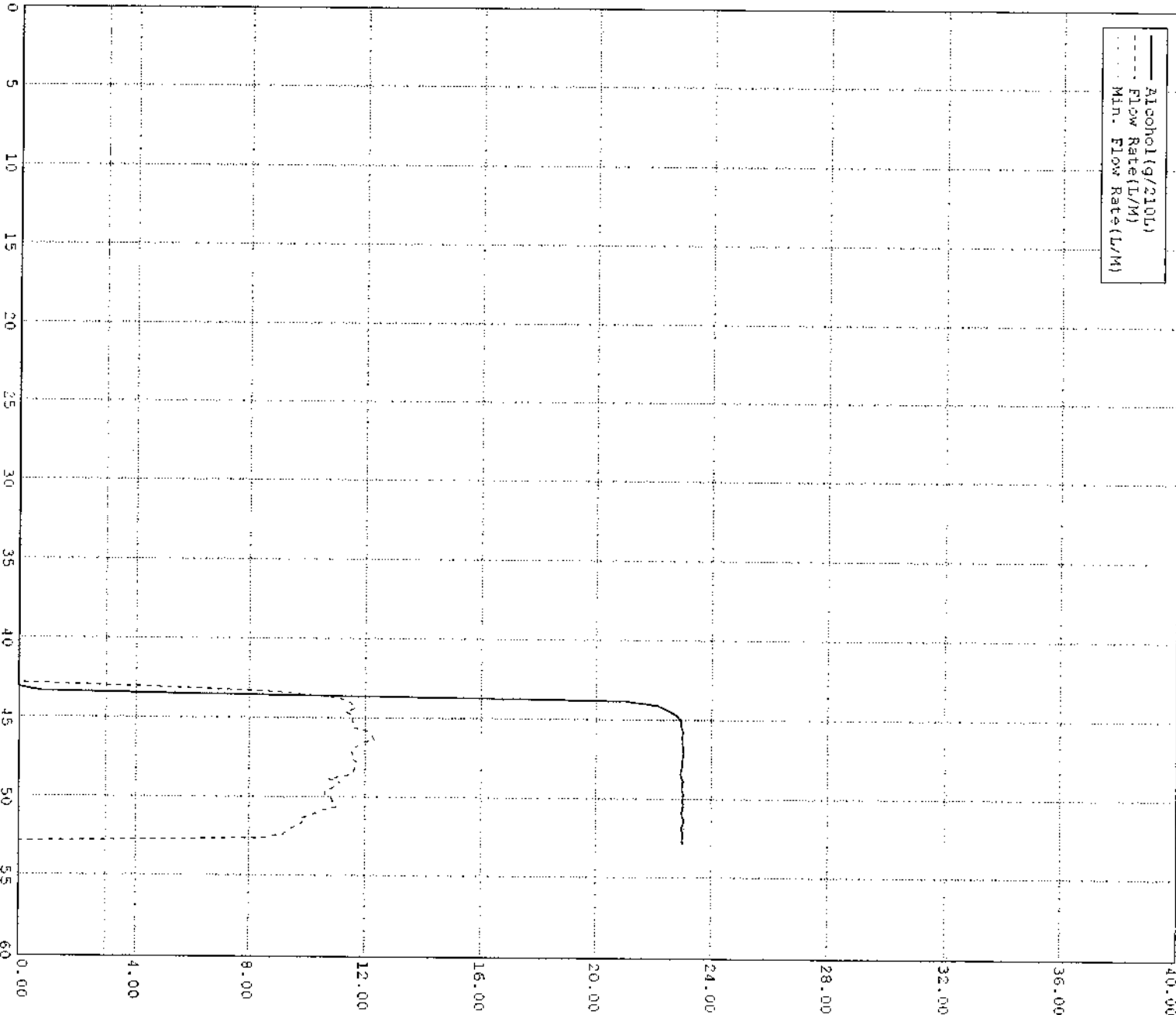
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	13:45
BLANK TEST	0.000	13:45
INTERNAL STANDARD	VERIFIED	13:46
Xg = 0.117 (2.39%)		
EXTERNAL STANDARD	0.078	13:46
X[1] = 0.0783 (0.0011)	(0.0044)	
BLANK TEST	0.000	13:47
SUBJECT SAMPLE	XXX	13:48
X[1] = 0.1152 (-0.0274)	(0.0037)	

Interference Detected

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SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 13:50:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

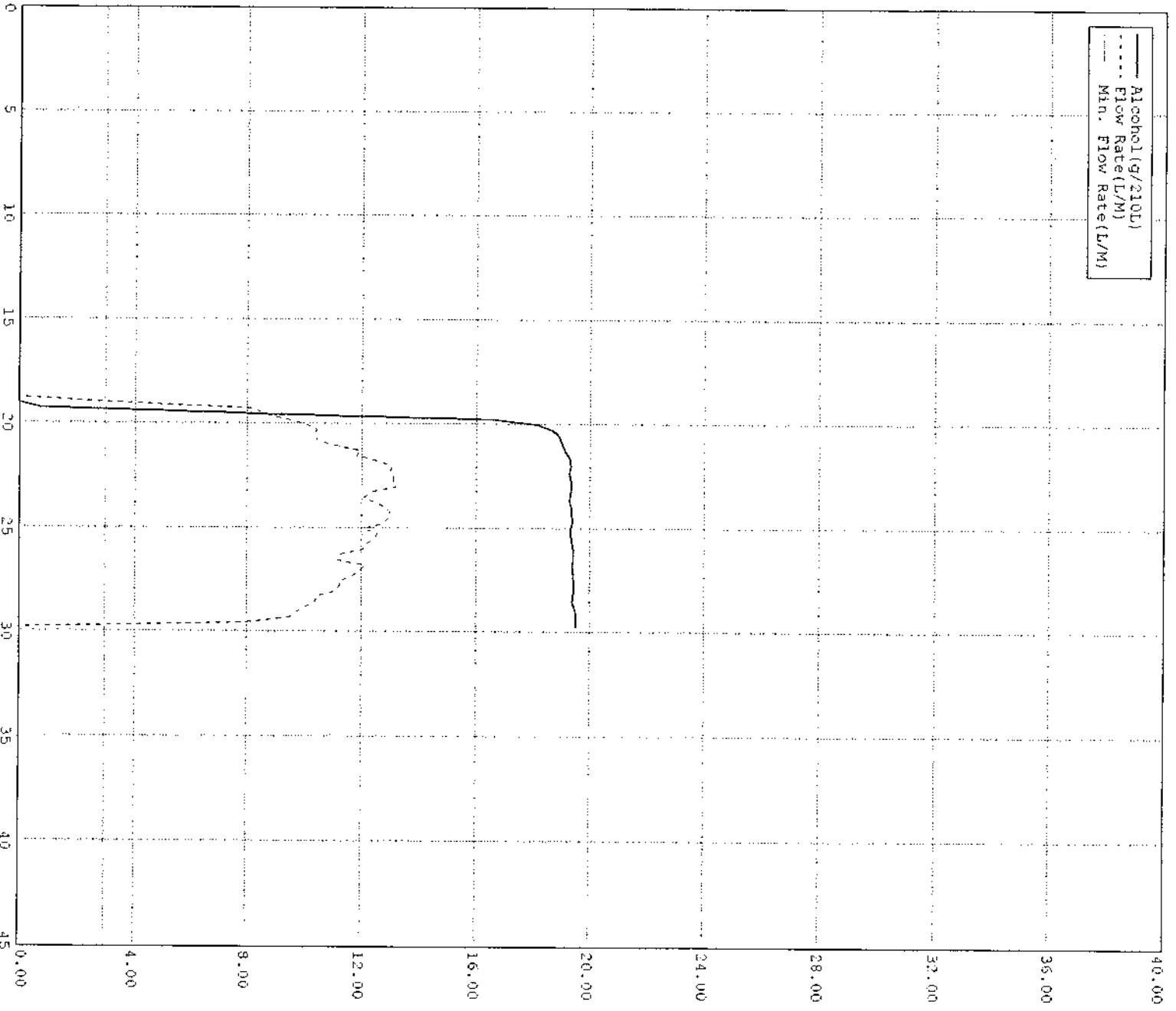
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INTERFERENCE NEGATIVE CONTROL
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	13:51
BLANK TEST	0.000	13:51
INTERNAL STANDARD	VERIFIED	13:52
Xg = 0.117 (1.69%)		
EXTERNAL STANDARD	0.077	13:52
X[1] = 0.0771 (0.0002) (0.0038)		
BLANK TEST	0.000	13:53
SUBJECT SAMPLE (Vol=2.02L)	0.098	13:53
X[1] = 0.0982 (0.0007) (0.0029)		
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.077	13:54
X[1] = 0.0770 (-0.0001) (0.0037)		
BLANK TEST	0.000	13:55

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SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 13:34:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

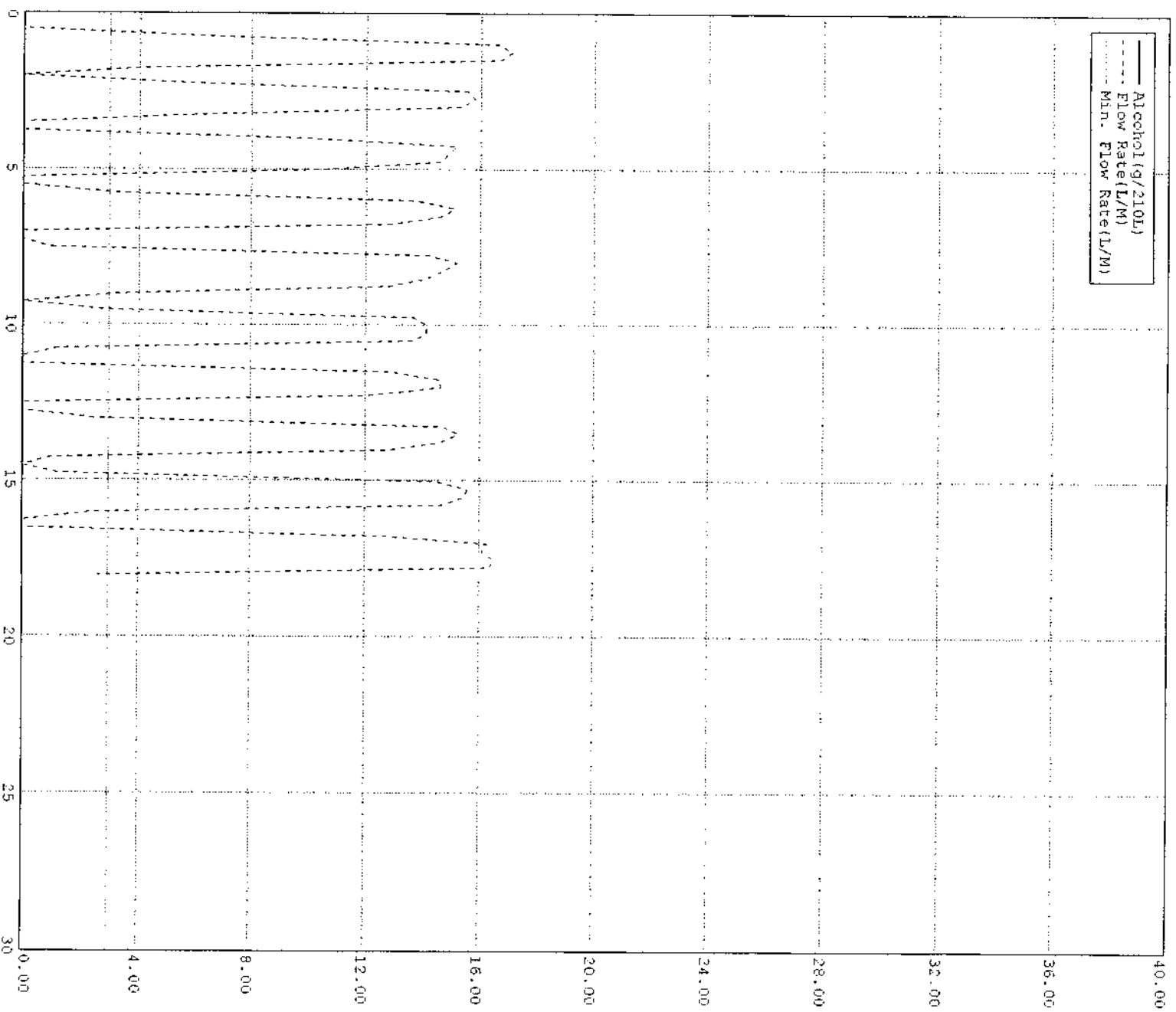
DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	13:35
BLANK TEST	0.000	13:36
INTERNAL STANDARD	0.077	13:36
EXTERNAL STANDARD	0.000	13:36
BLANK TEST	0.000	13:37
SUBJECT SAMPLE	XXX	13:37

Maximum Attempts Exceeded

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100360

Date: 03/31/2017
Time: 14:18:17

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

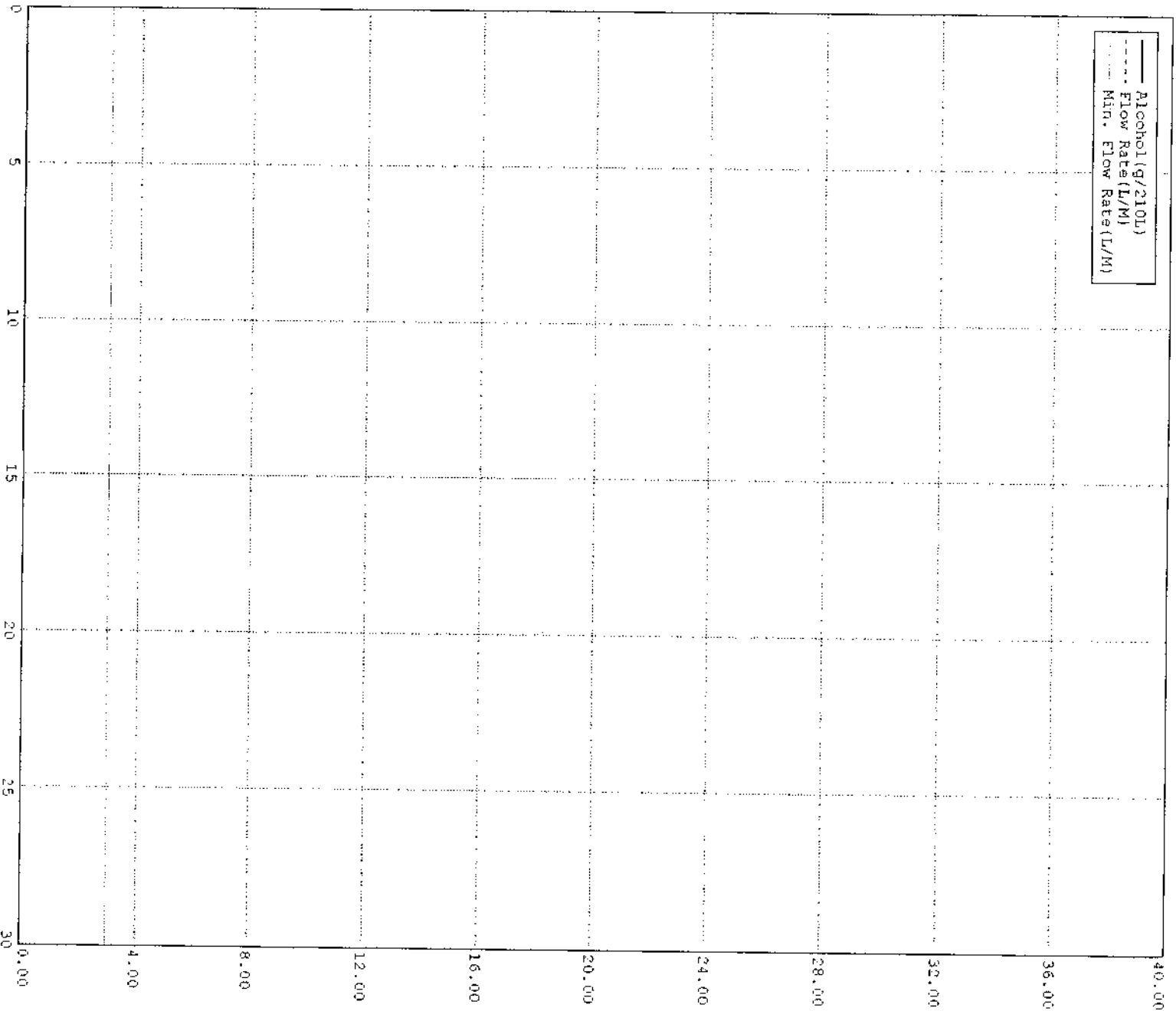
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:19
INTERNAL STANDARD VERIFIED 14:19
EXTERNAL STANDARD 0.077 14:19
BLANK TEST 0.000 14:20

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100360

Date: 03/31/2017
Time: 14:31:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:32
BLANK TEST	0.000	14:32
INTERNAL STANDARD	VERIFIED	14:32
EXTERNAL STANDARD	0.077	14:32
BLANK TEST	0.000	14:33
SUBJECT SAMPLE (Vol=2.03L)	0.000	14:34
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.078	14:35
BLANK TEST	0.000	14:36

