

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 100391 Analyst Brandi Barnett Start Date 4/3/19

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 AG805804 Exp 2/27/20
- ii. 0.040g/210L Mnf Airgas Lot AG733403 Exp 11/30/19
- iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 9/18/20
- iv. 0.100g/210L Mnf Airgas Lot AG805903 Exp 2/28/20
- v. 0.200g/210L Mnf Guth Lot 17340 Exp 10/9/19
 1. Simulator S/N DR4177 Date Calibrated 6/4/18
- vi. 0.300g/210L Mnf Guth Lot 17350 Exp 10/11/19
 1. Simulator S/N DR6267 Date Calibrated 6/4/18

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

- i. Acetone - Mnf Guth Lot 18070 ^{emb} ~~0.100~~ Level 0.100 Exp 5/14/19 02/26/20
 1. Simulator S/N SD1200 Date Calibrated 6/1/18 BMB 4/10/19
- ii. Isopropanol - Mnf Guth Lot 18070 Level 0.100 Exp 5/14/19 02/26/20
 1. Simulator S/N DR4176 Date Calibrated 6/4/18 BMB 4/10/19
- iii. Negative Control - Mnf Guth Lot 18070 Level 0.100 Exp 5/14/19 02/26/20
 1. Simulator S/N DR4163 Date Calibrated 6/4/18 BMB 4/10/19

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 4/5/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/03/2019
Time: 13:29:31

VERSIONS

DMT: 3.02
PIC: 3.01
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.77 V PASSED
(1.06 V - 2.48 V)
Cooler Voltage = 1.73 V PASSED
(1.04 V - 2.42 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.545 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 0.79% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100391

Date: 04/03/2019

Time: 1:37 PM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 45.3°C

Current Barometer 29.3 in

Volume (Ltr) 1.48

Settings

Lamp: 1.69 V

Bias: 80 V

Cooler: 1.73 V

Chopper: 534 Hz

Voltages (V)

Flow: 1.05 V

Detector: 0.055 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/01/2019
Time: 08:37:32

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca	=	0.1000		
CAL	=	0.962473	0.800	<= CAL < 1.200
b1	=	0.0001	0.0000	<= b1 < 0.0040
b2	=	0.0063	0.0010	<= b2 < 0.0100
b3	=	0.0000	0.0000	<= b3 < 0.0040
Xq	=	0.0877	0.0500	<= Xq < 0.2000
a21	=	1.216852	1.050	<= a21 < 1.300
a31	=	0.495105	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/03/2019
Time: 13:38:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

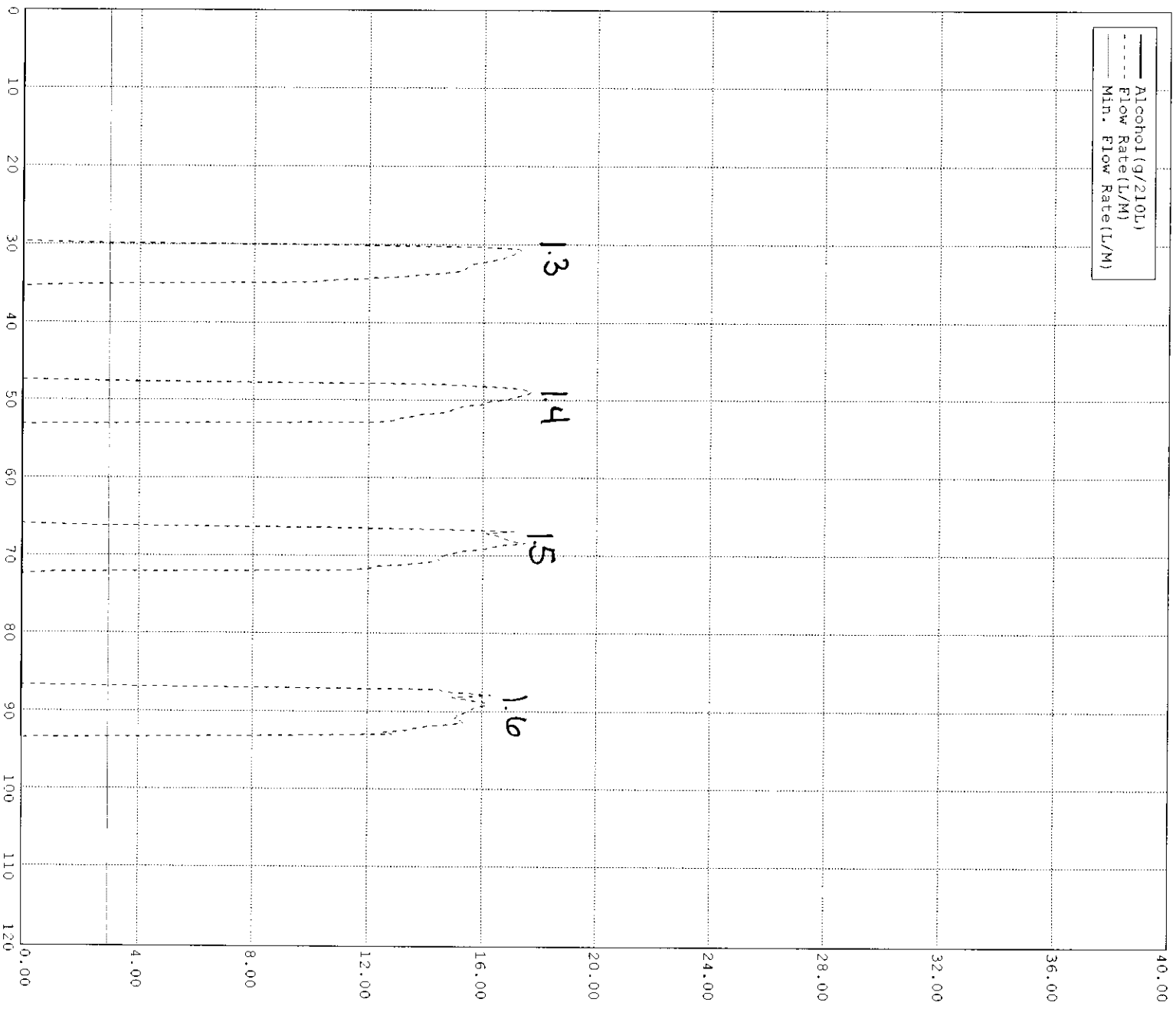
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.34: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:40
BLANK TEST	0.000	13:40
INTERNAL STANDARD	VERIFIED	13:40
EXTERNAL STANDARD	0.078	13:40
BLANK TEST	0.000	13:41
SUBJECT SAMPLE (Vol=1.55L)	0.000	13:43
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.078	13:44
BLANK TEST	0.000	13:45

BBB



LINEARITY CHECK

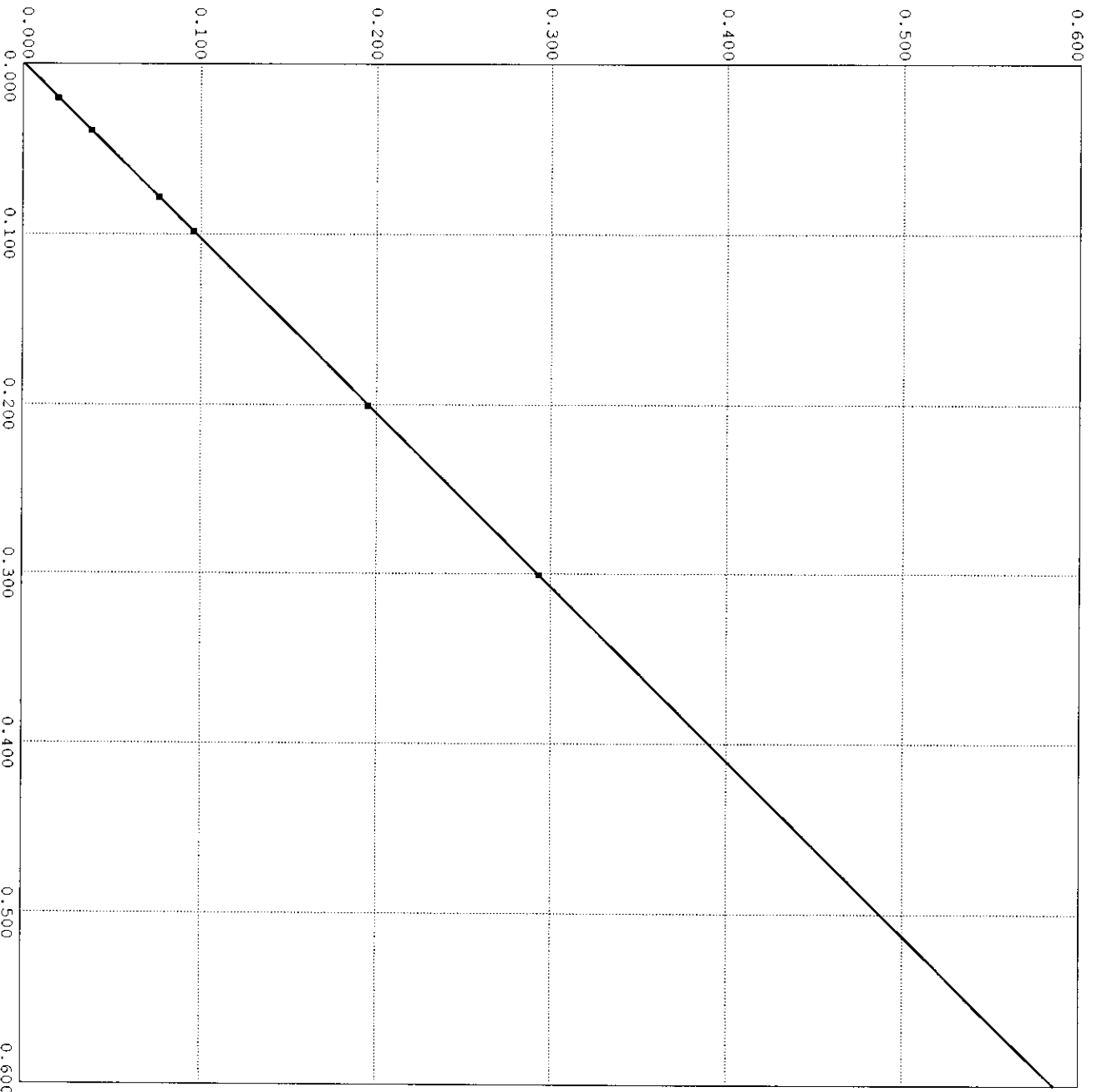
Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/04/2019
Time: 10:40:29

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0204	0.0005
0.039	0.0392	0.0004
0.078	0.0772	0.0004
0.098	0.0970	0.0000
0.200	0.1958	0.0004
0.300	0.2938	0.0004

SLOPE = 0.975272
R² = 0.999995



BRB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100391

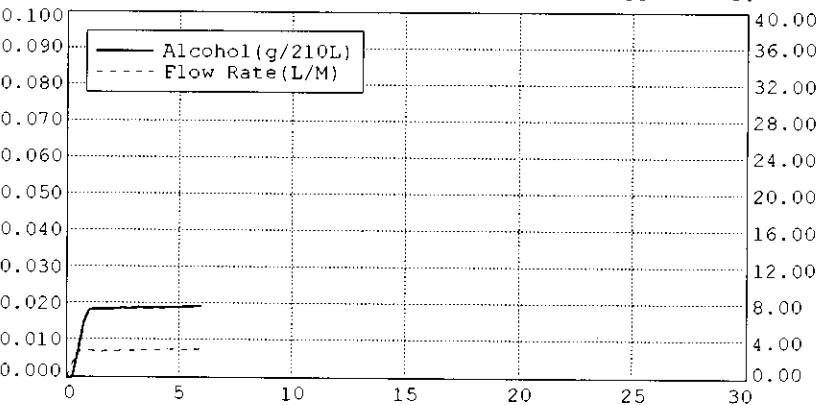
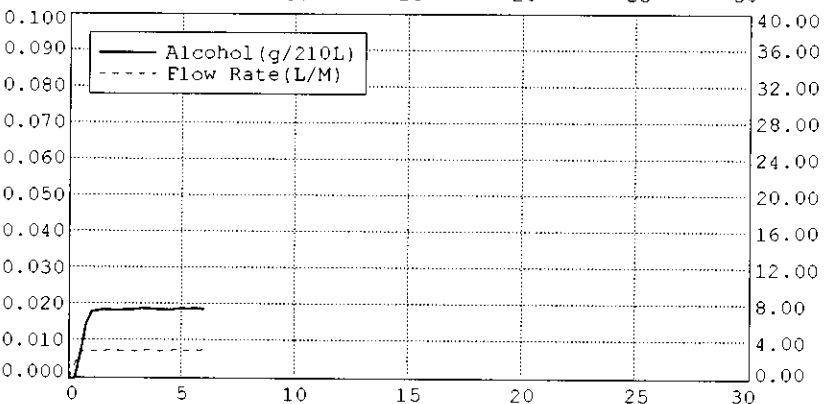
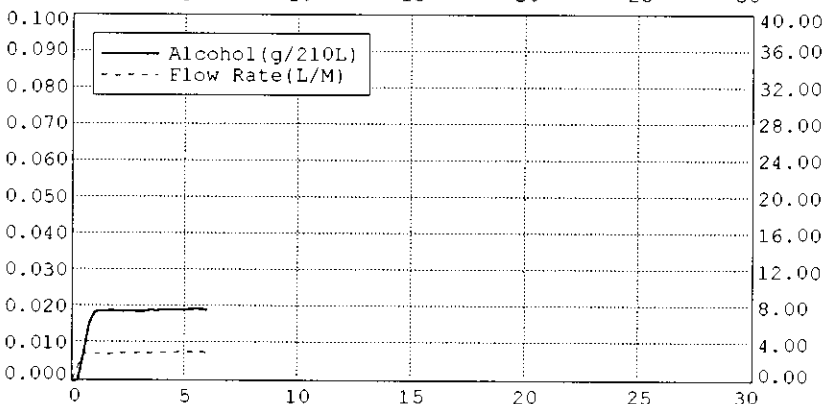
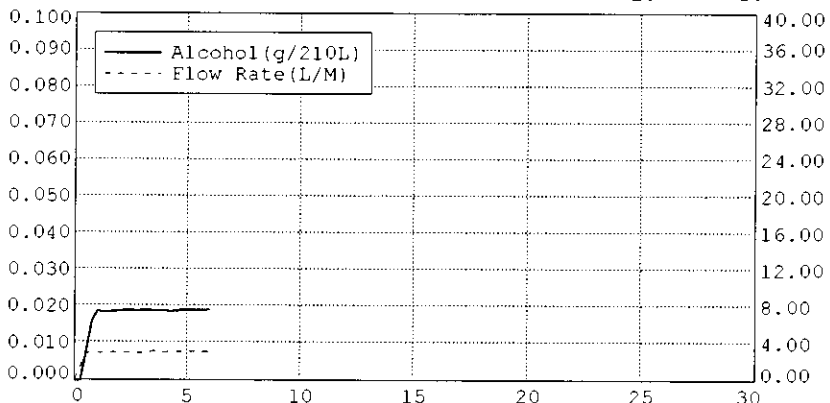
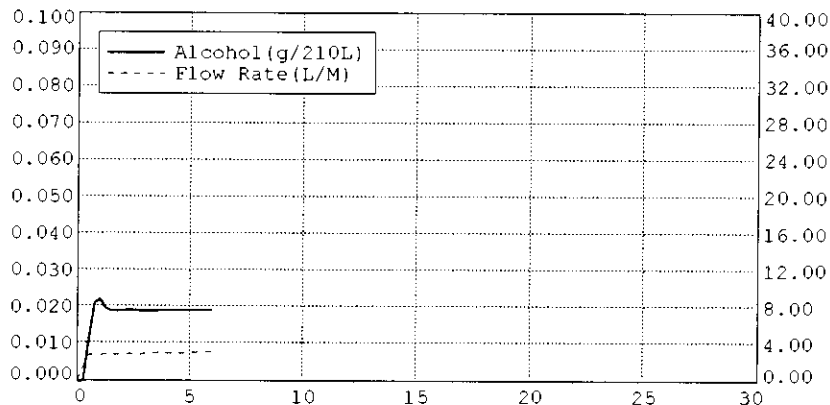
Date: 04/04/2019
 Time: 10:40:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.35: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 844 psi

BLANK TEST	0.000	10:42
INTERNAL STANDARD	VERIFIED	10:42
EXTERNAL STANDARD	0.021	10:43
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.020	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.020	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.020	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.021	10:47
BLANK TEST	0.000	10:48

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100391

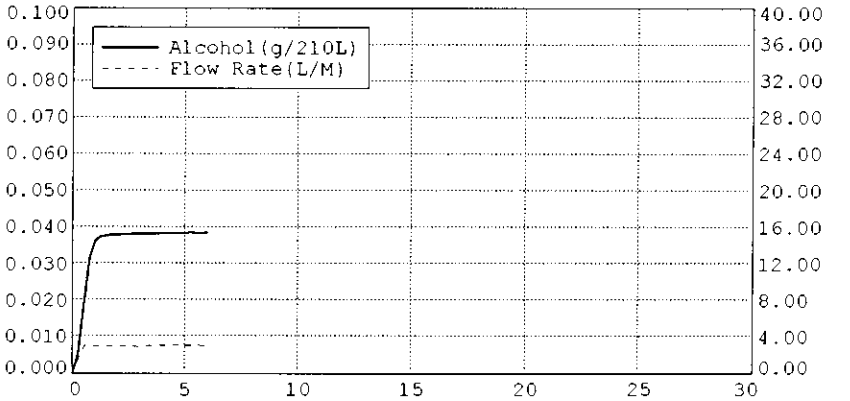
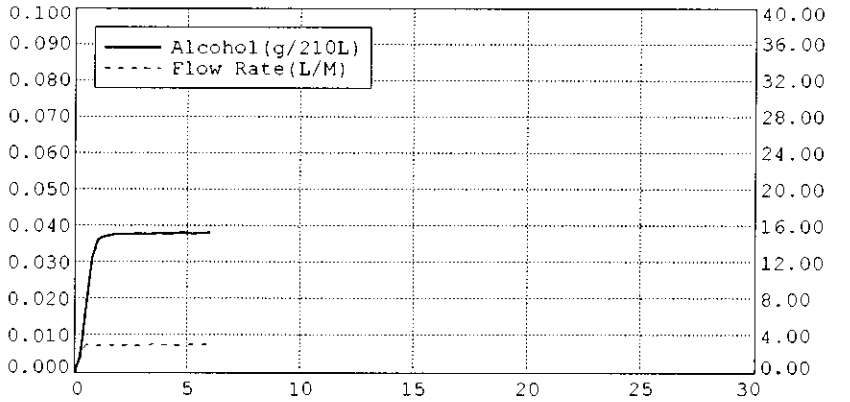
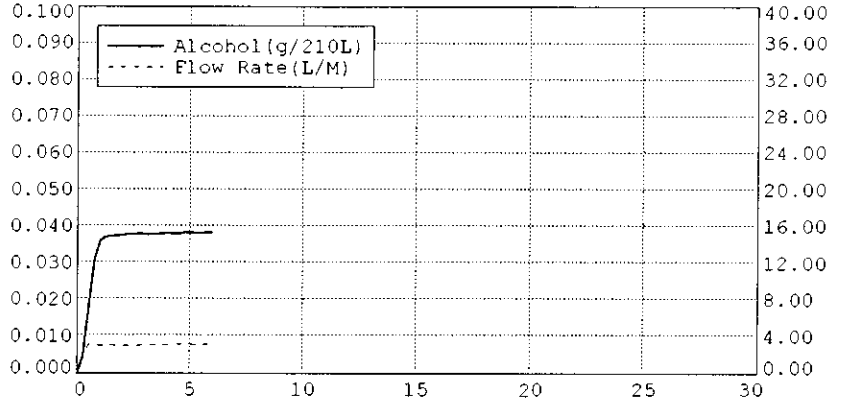
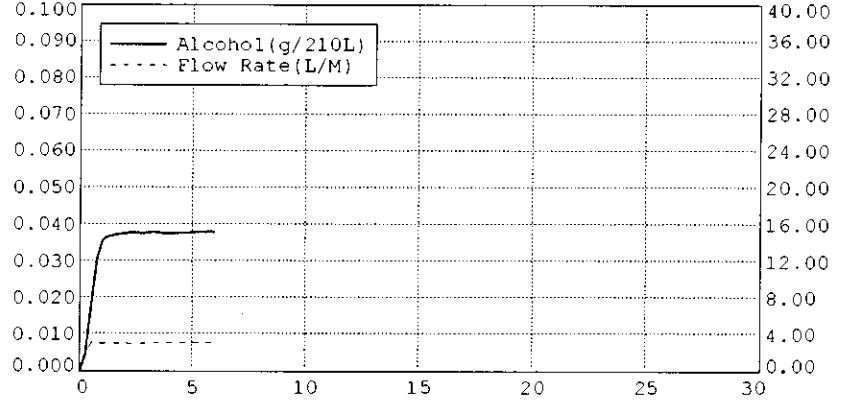
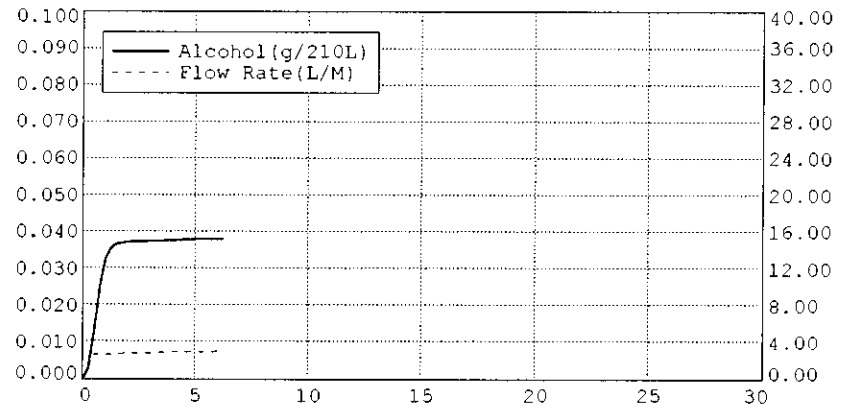
Date: 04/04/2019
 Time: 11:00:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.35: 0.039
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 1134 psi

BLANK TEST	0.000	11:11
INTERNAL STANDARD	VERIFIED	11:11
EXTERNAL STANDARD	0.039	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.039	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.039	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.039	11:14
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.040	11:15
BLANK TEST	0.000	11:16

Average = 0.0392
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100391

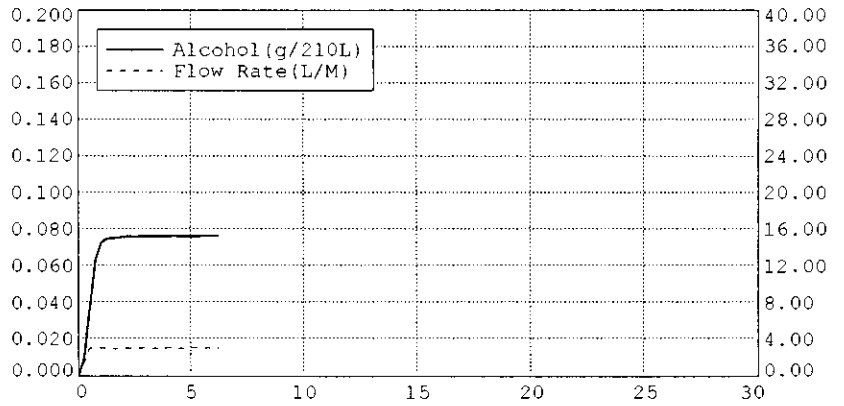
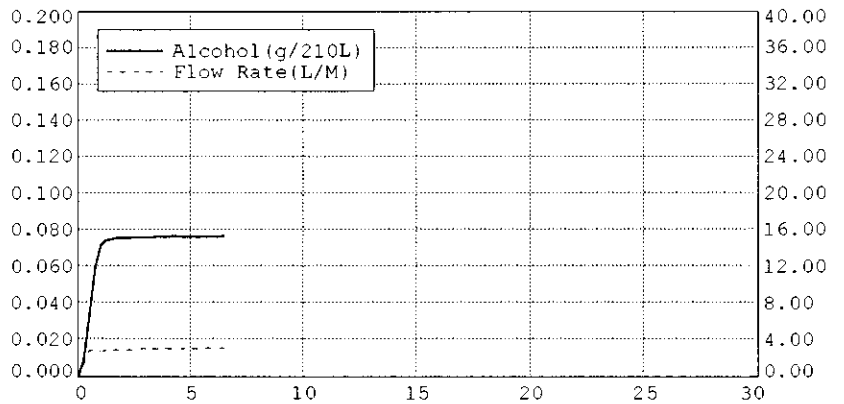
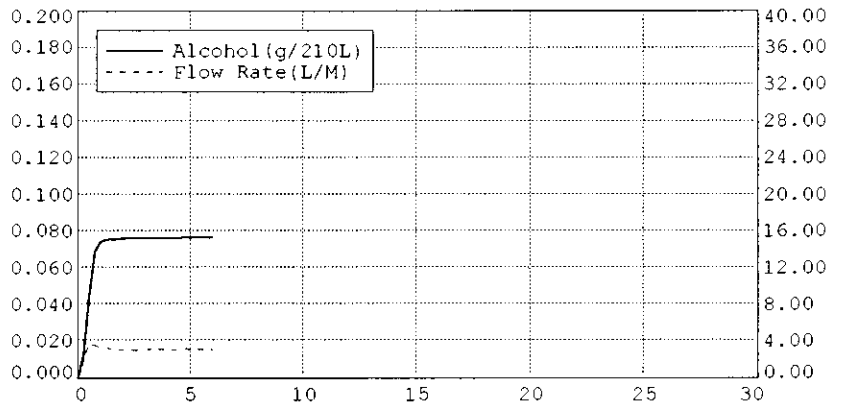
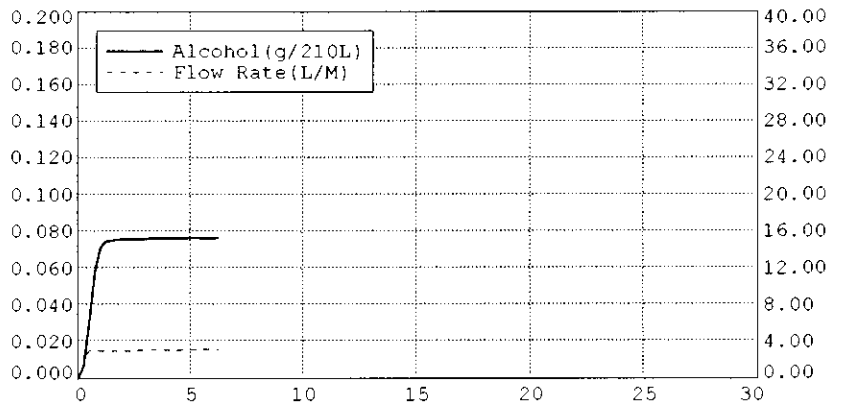
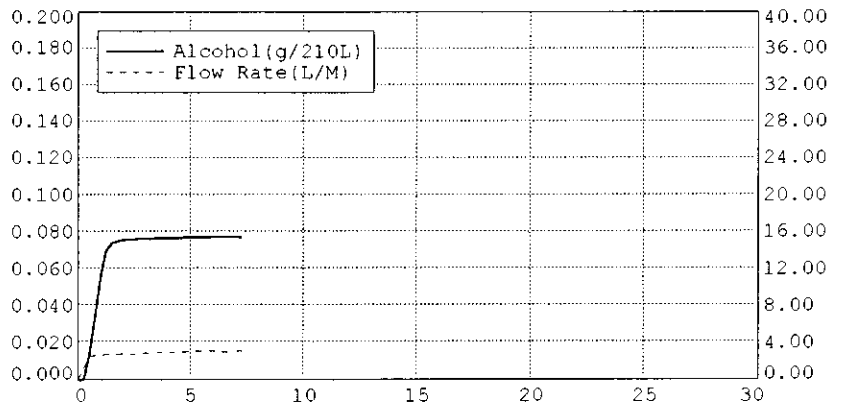
Date: 04/04/2019
 Time: 12:48:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.35: 0.078
 LOT #: ~~AG8261011~~ AG826101 *OMB 4/10/19*
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 1168 psi

BLANK TEST	0.000	12:49
INTERNAL STANDARD	VERIFIED	12:49
EXTERNAL STANDARD	0.078	12:50
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.077	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.077	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.077	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.077	12:54
BLANK TEST	0.000	12:55

Average = 0.0772
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100391

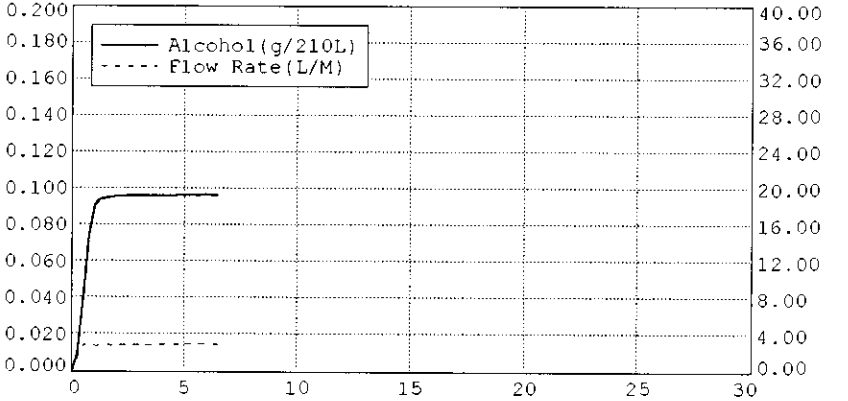
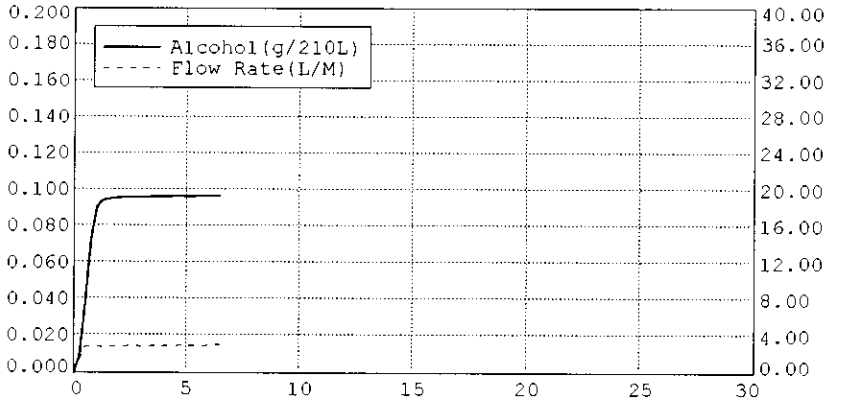
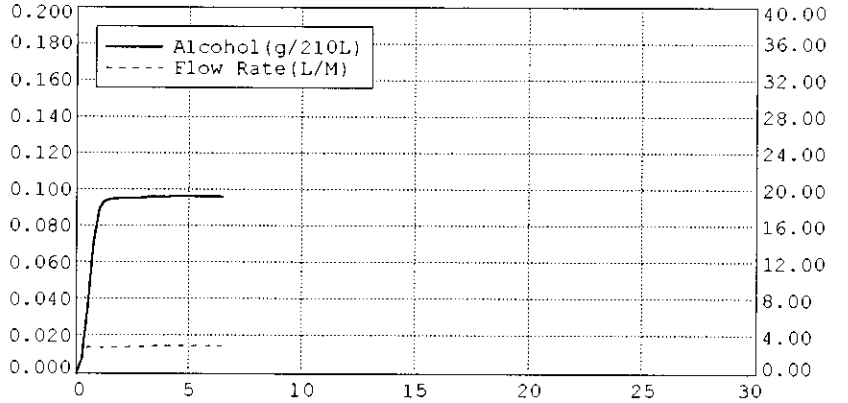
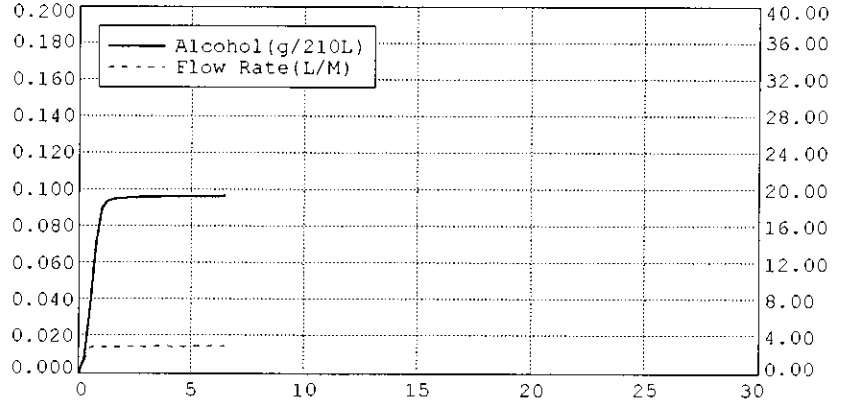
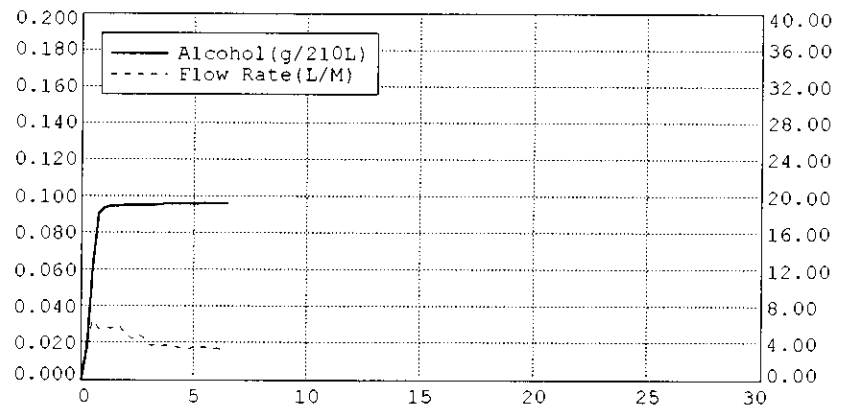
Date: 04/04/2019
 Time: 12:58:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.35: 0.098
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 1022 psi

BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	12:59
EXTERNAL STANDARD	0.097	13:00
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.097	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.097	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.097	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.097	13:04
BLANK TEST	0.000	13:05

Average = 0.0970
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100391

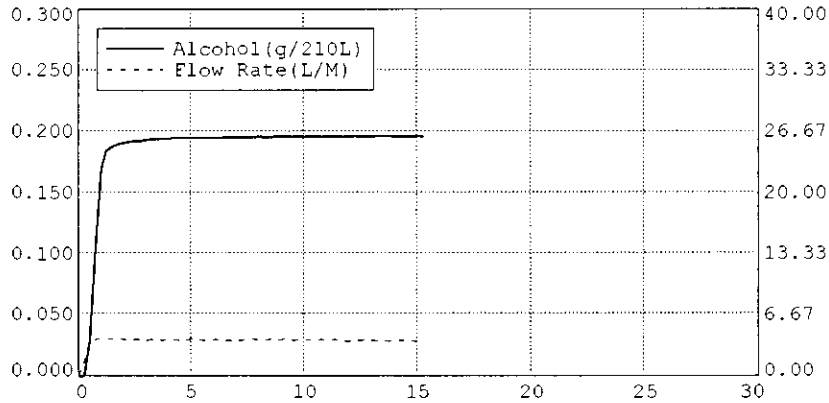
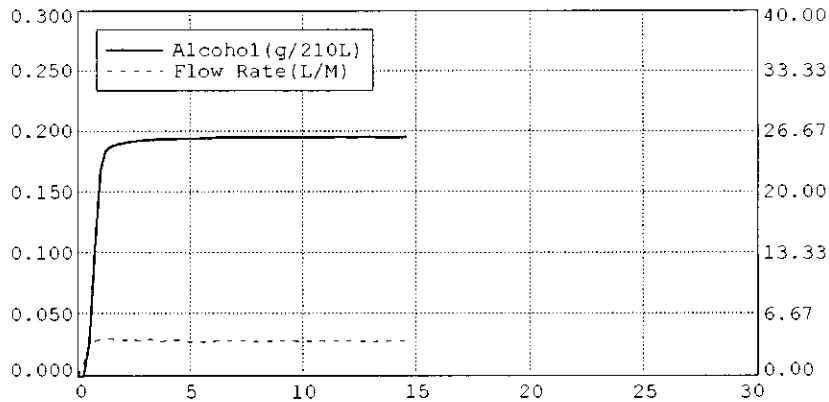
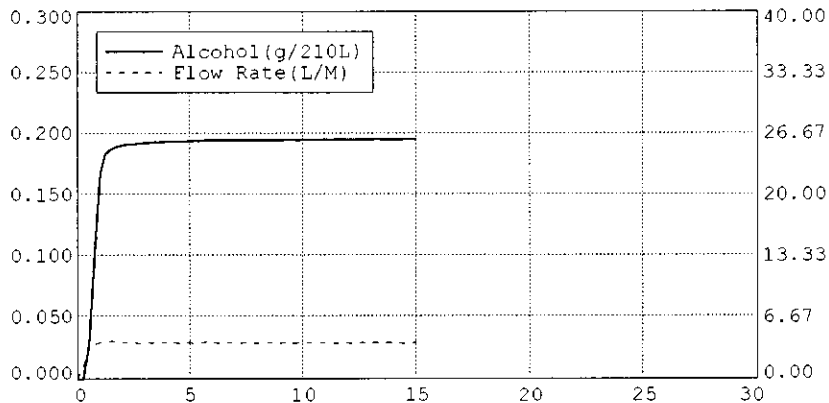
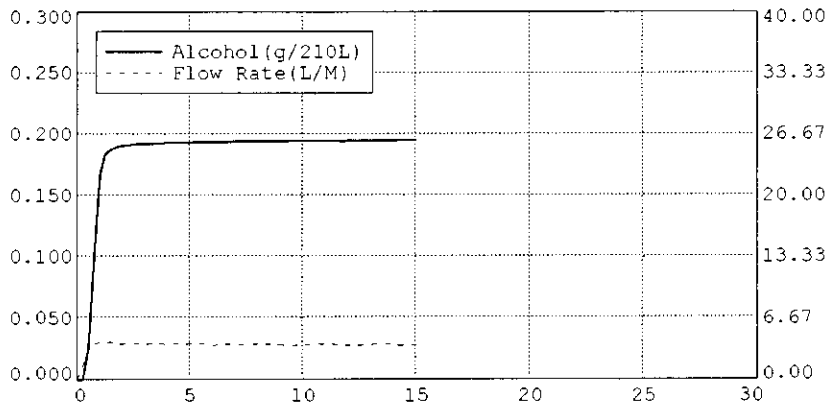
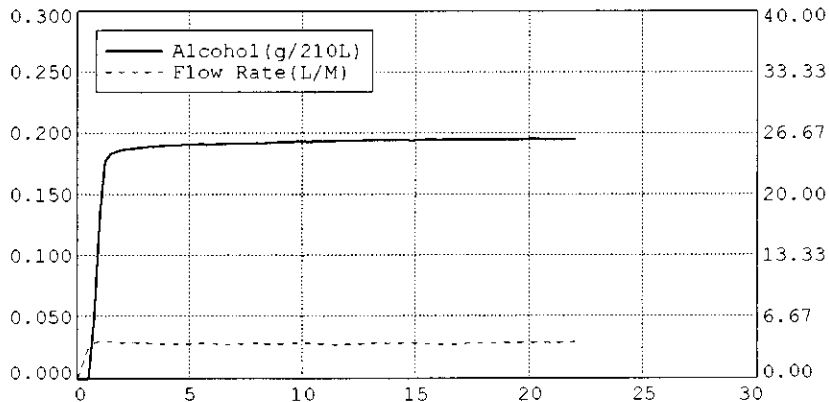
Date: 04/04/2019
 Time: 13:31:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: GUTH 17340
 EXPIRATION: 10/09/2019

BLANK TEST	0.000	13:32
INTERNAL STANDARD	VERIFIED	13:32
EXTERNAL STANDARD	0.196	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.195	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.196	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.196	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.196	13:38
BLANK TEST	0.000	13:39

Average = 0.1958
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100391

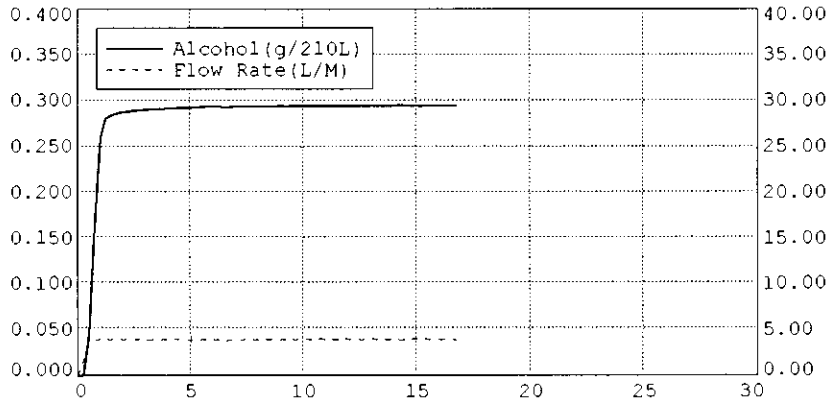
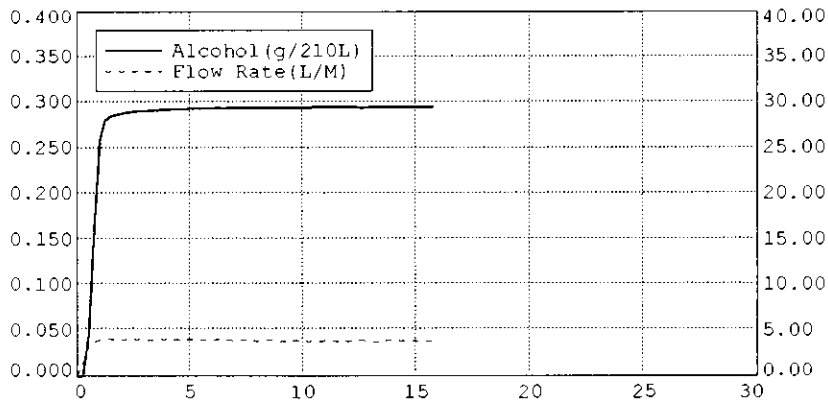
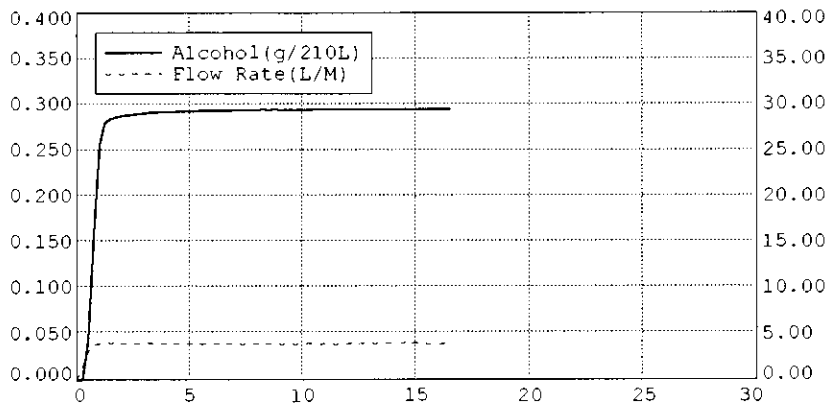
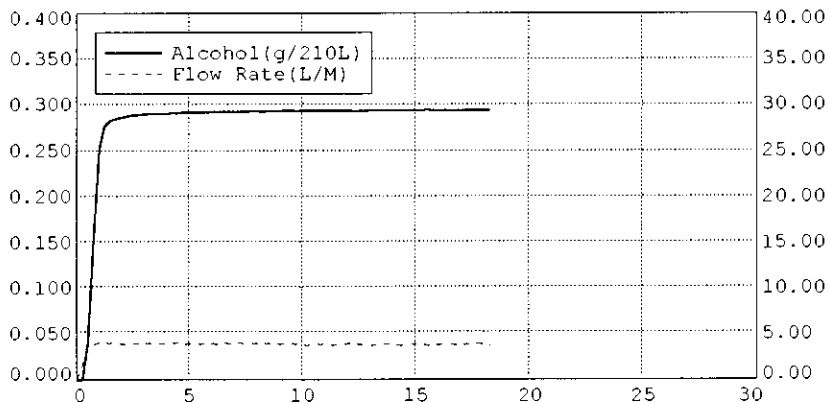
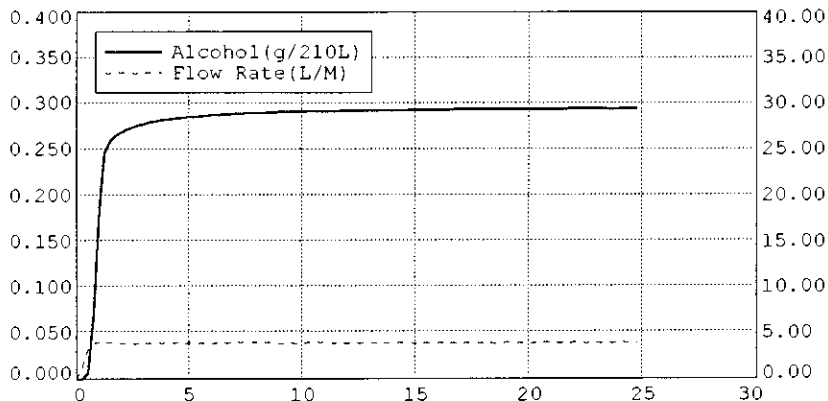
Date: 04/04/2019
 Time: 13:42:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: GUTH 17350
 EXPIRATION: 10/11/2019

BLANK TEST	0.000	13:44
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.294	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.293	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.294	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.294	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.294	13:49
BLANK TEST	0.000	13:50

Average = 0.2938
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/05/2019
Time: 10:45:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

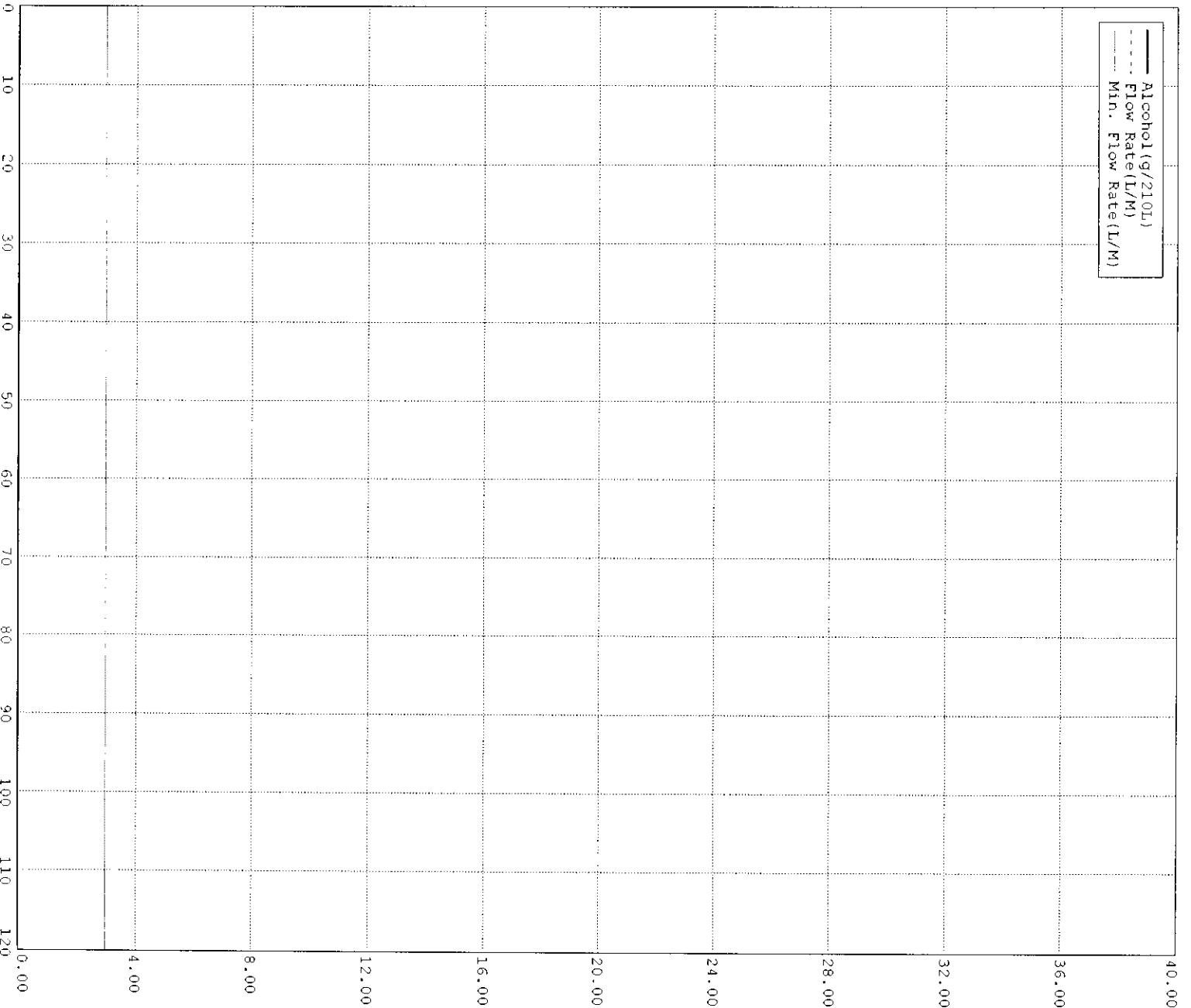
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.22: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:48
BLANK TEST	0.000	10:48
INTERNAL STANDARD	VERIFIED	10:48
EXTERNAL STANDARD	0.077	10:48
BLANK TEST	0.000	10:49
SUBJECT SAMPLE	INCOMPLETE	10:51

EMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/05/2019
Time: 10:53:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

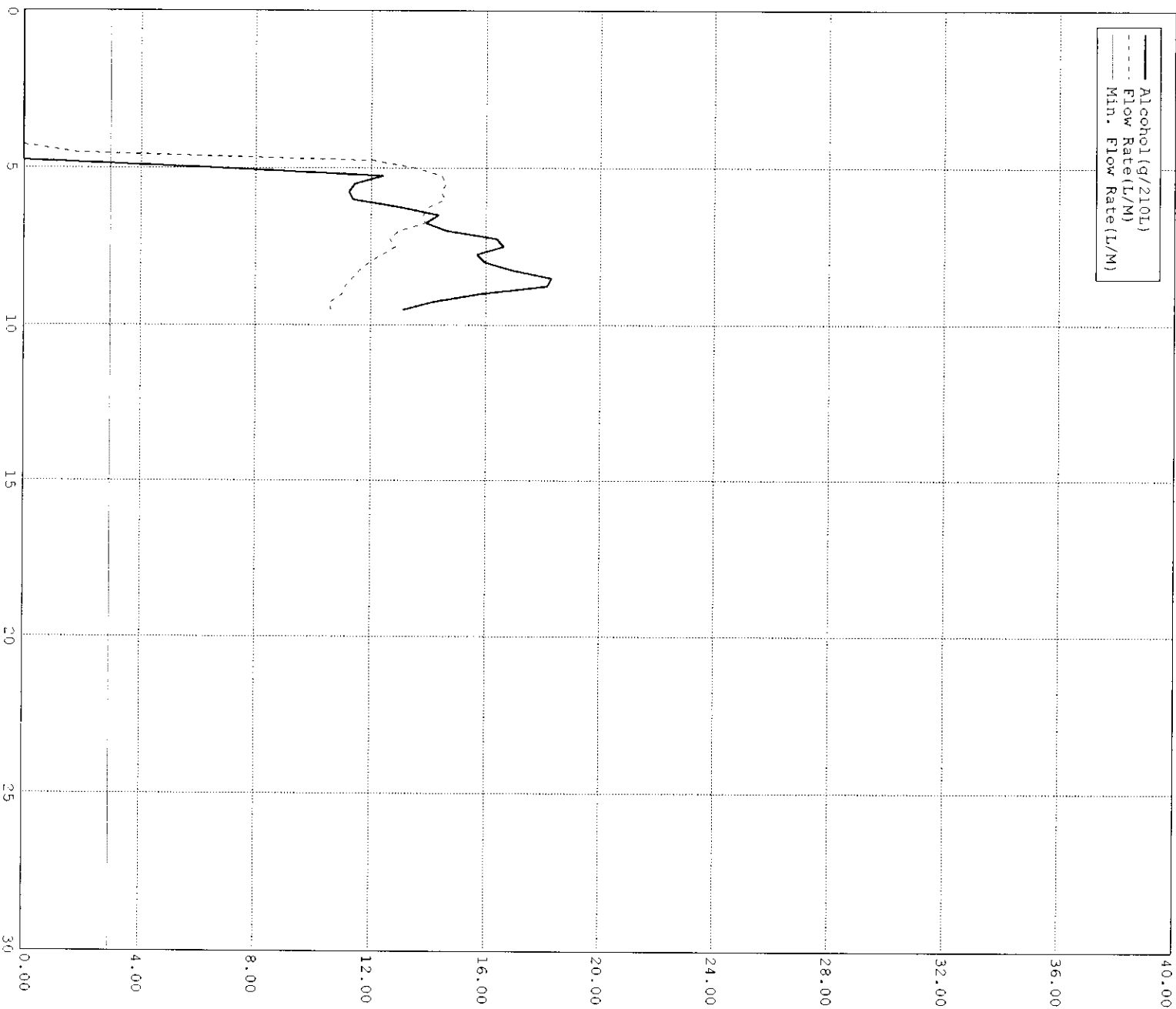
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.22: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:55
BLANK TEST	0.000	10:55
INTERNAL STANDARD	VERIFIED	10:56
EXTERNAL STANDARD	0.078	10:56
BLANK TEST	0.000	10:57
SUBJECT SAMPLE	INVALID	10:58

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/05/2019
Time: 12:11:03

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

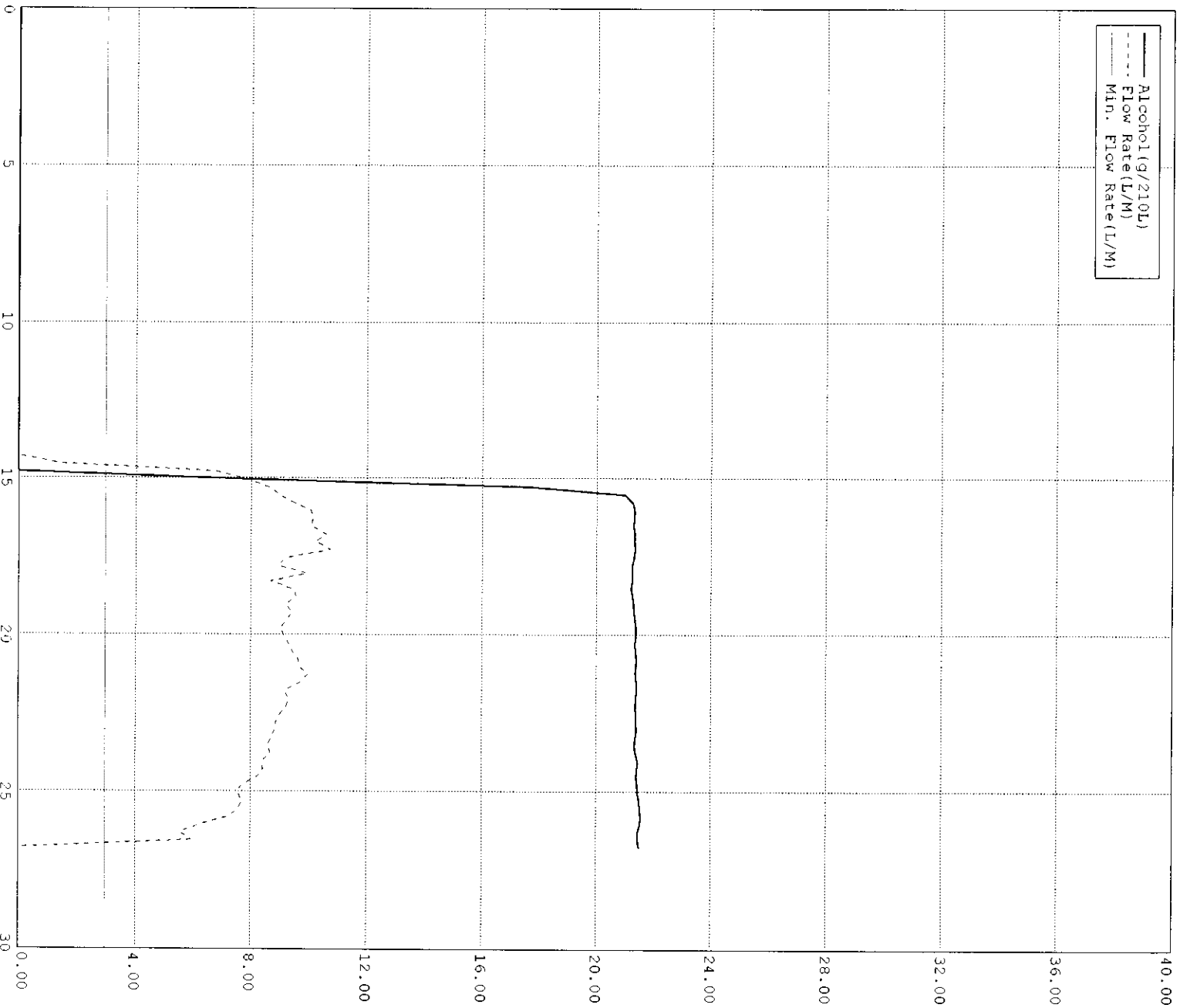
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.20: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:12
BLANK TEST	0.000	12:12
INTERNAL STANDARD	VERIFIED	12:12
Xq = 0.089 (0.99%)		
EXTERNAL STANDARD	0.078	12:12
X[1] = 0.0776 (-0.0010)	(0.0011)	
BLANK TEST	0.000	12:13
SUBJECT SAMPLE	XXX	12:14
X[1] = 0.1080 (-0.0183)	(0.0002)	

Interference Detected

Filter 2 Avg: -0.0012
Filter 3 Avg: 0.0011
4/5/19 BMB

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/05/2019
Time: 12:16:10

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

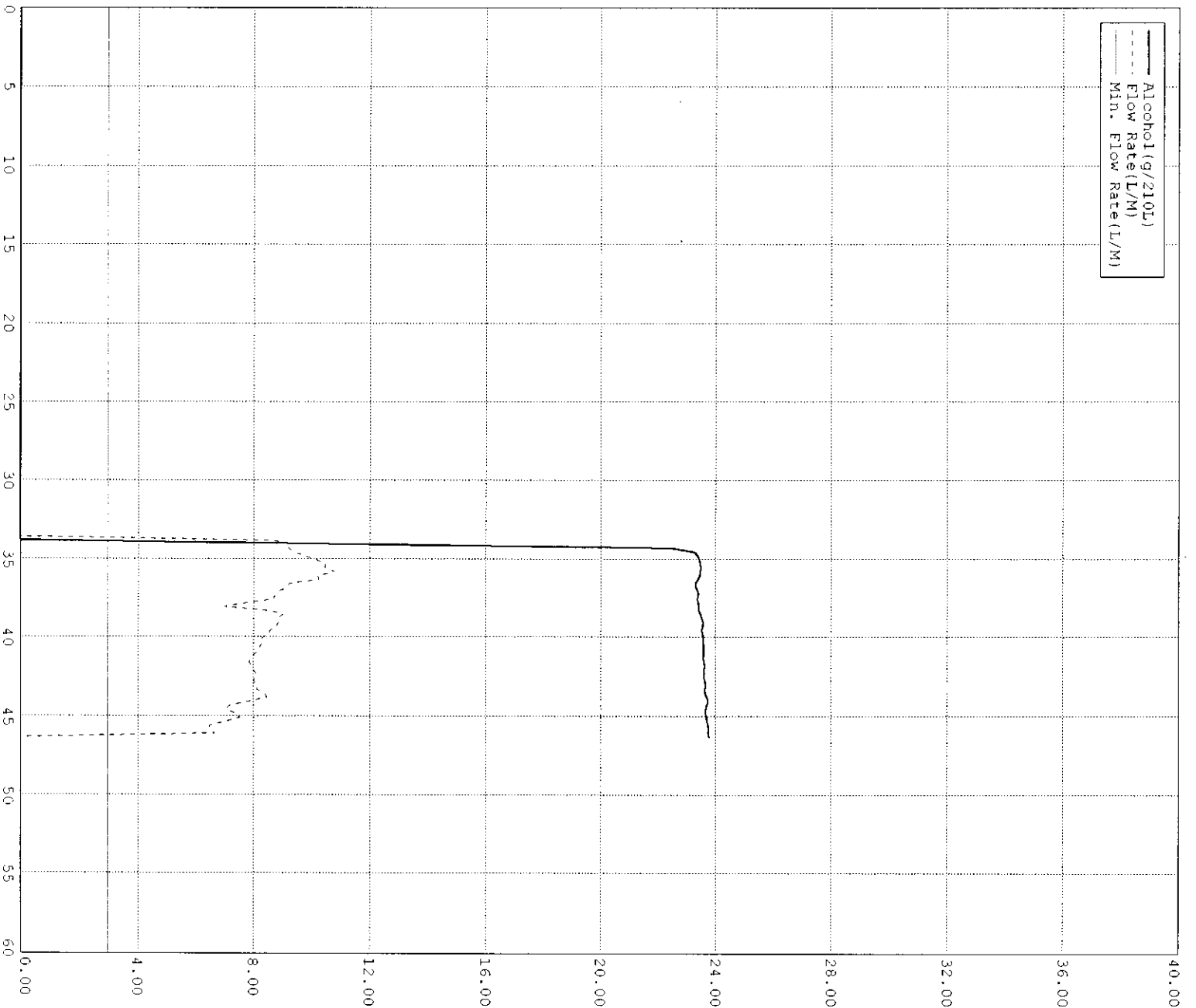
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.20: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 12:19
BLANK TEST 0.000 12:19
INTERNAL STANDARD VERIFIED 12:19
Xq = 0.088 (0.80%)
EXTERNAL STANDARD 0.077 12:19
X[1] = 0.0769 (-0.0016) (0.0008)
BLANK TEST 0.000 12:20
SUBJECT SAMPLE XXX 12:21
X[1] = 0.1191 (-0.0310) (0.0007)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/05/2019
Time: 12:29:37

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

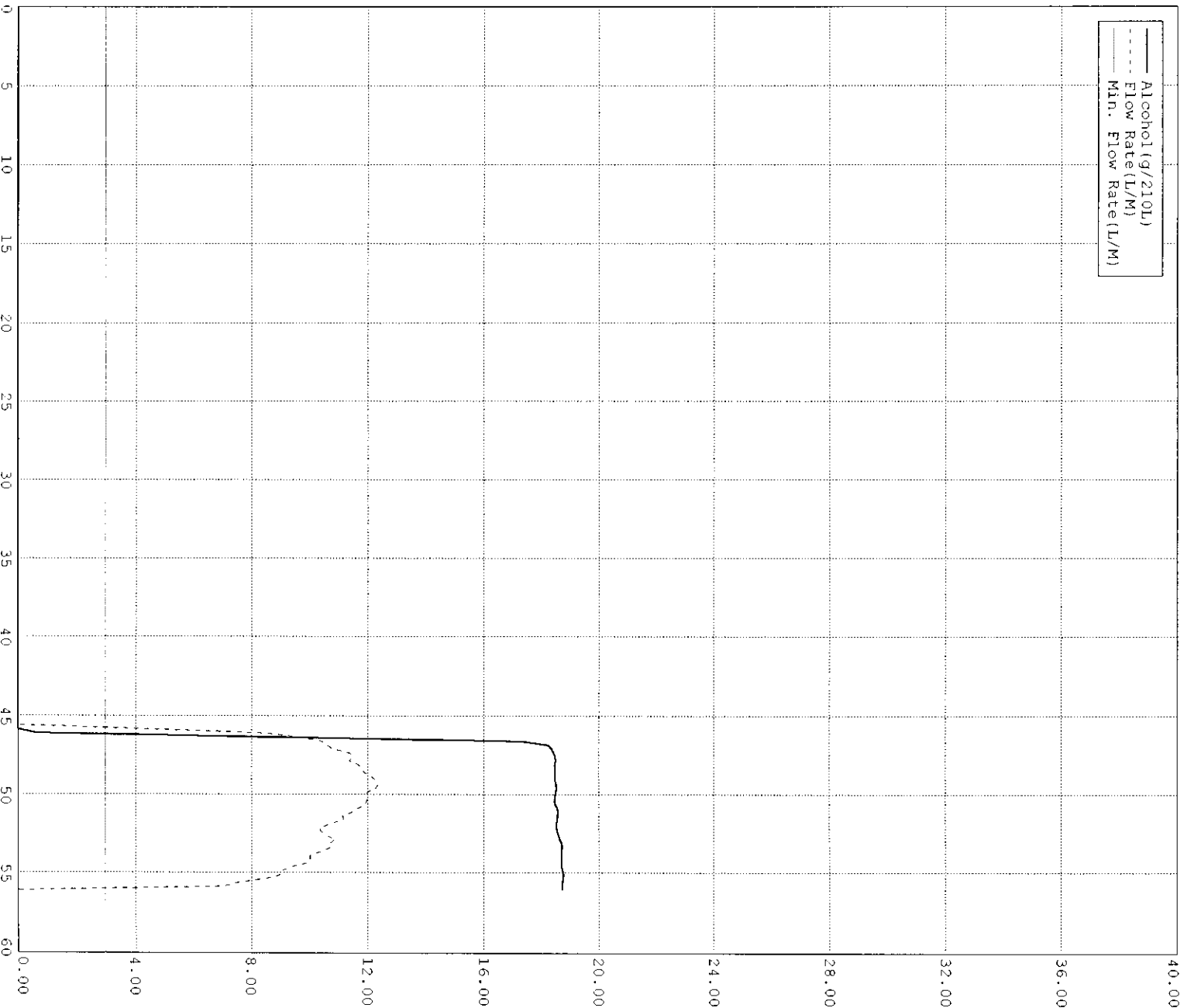
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:32
BLANK TEST	0.000	12:32
INTERNAL STANDARD	VERIFIED	12:32
Xq = 0.089 (0.99%)		
EXTERNAL STANDARD	0.078	12:32
X[1] = 0.0775 (-0.0011)	(0.0014)	
BLANK TEST	0.000	12:33
SUBJECT SAMPLE (Vol=1.80L)	0.094	12:34
X[1] = 0.0944 (-0.0001)	(0.0005)	
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.077	12:35
X[1] = 0.0770 (-0.0011)	(0.0009)	
BLANK TEST	0.000	12:36

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/05/2019
Time: 11:09:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

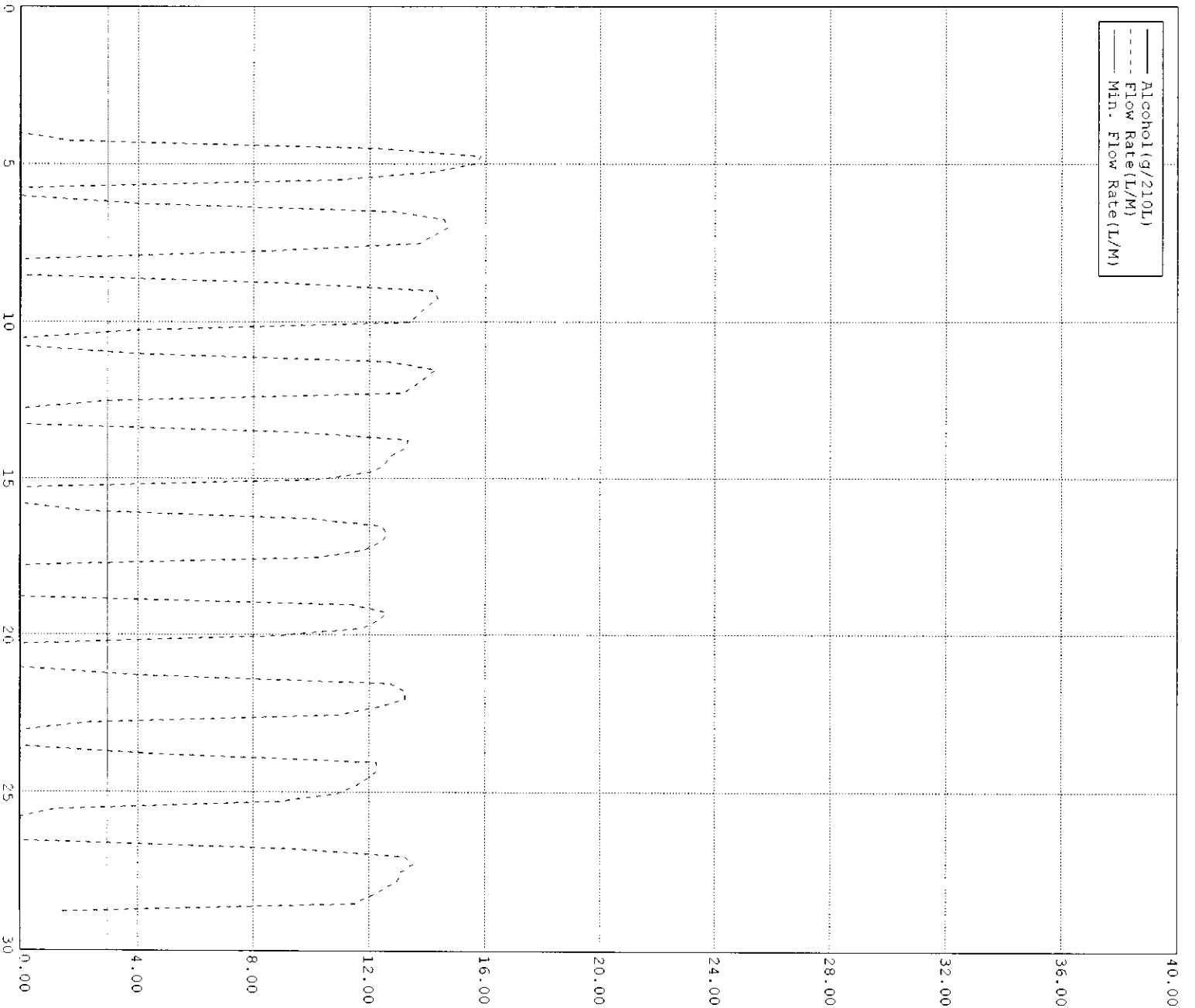
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.21: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:10
BLANK TEST	0.000	11:10
INTERNAL STANDARD	0.078	11:10
EXTERNAL STANDARD	0.000	11:11
BLANK TEST	0.000	11:11
SUBJECT SAMPLE	XXX	11:12

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/05/2019
Time: 12:02:16

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

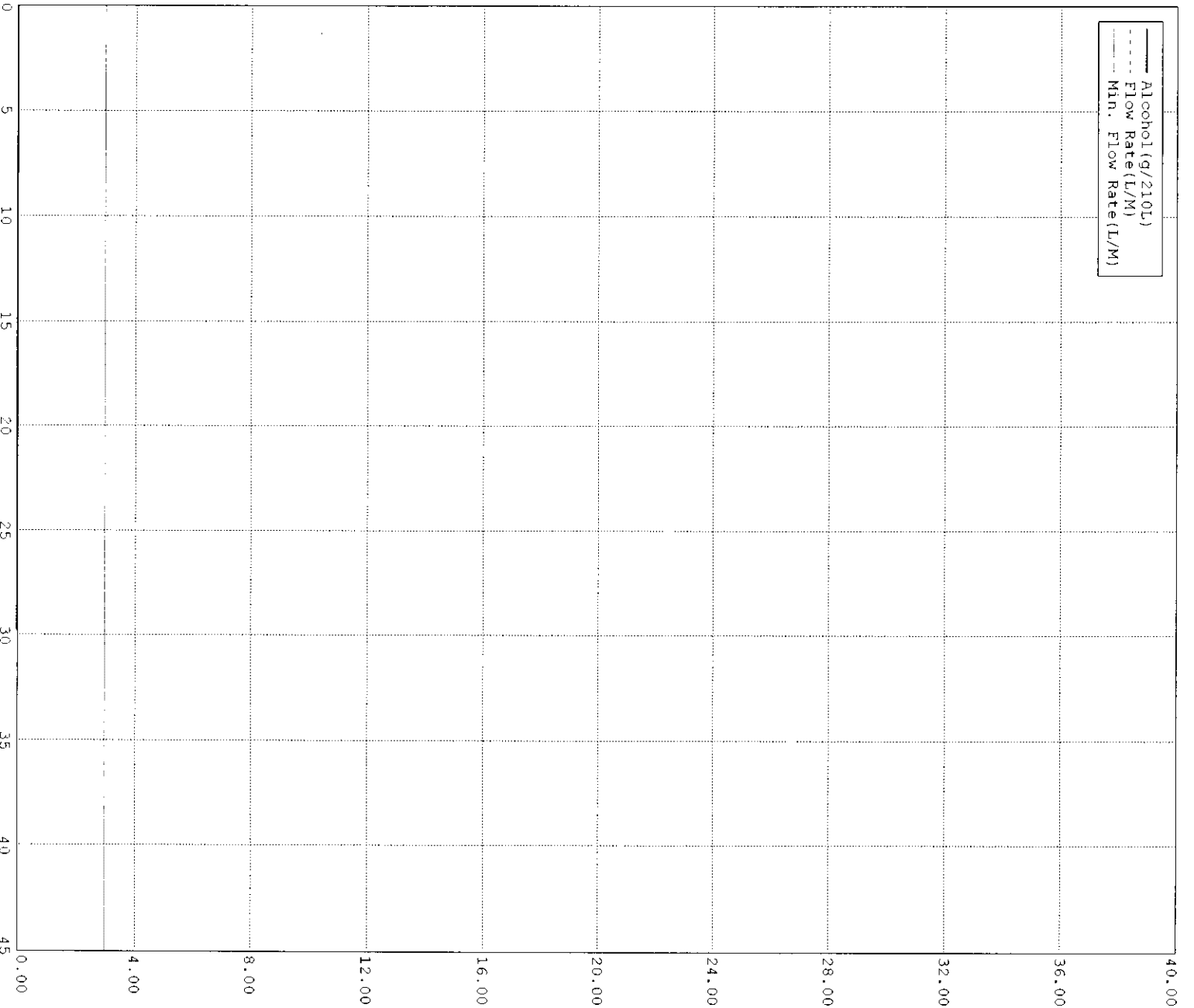
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.20: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:04
BLANK TEST	0.000	12:04
INTERNAL STANDARD	VERIFIED	12:04
EXTERNAL STANDARD	0.078	12:04
BLANK TEST	0.000	12:05

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100391

Date: 04/05/2019
Time: 12:58:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
NONDRINKING SUBJECT TEST
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:59
BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	12:59
EXTERNAL STANDARD	0.077	12:59
BLANK TEST	0.000	13:00
SUBJECT SAMPLE (Vol=1.95L)	0.000	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.077	13:02
BLANK TEST	0.000	13:03

BMB

