

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 100676 Analyst Brandi Barnett Start Date 9/11/19

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 19040 Exp 1/29/21
 - 1. Simulator S/N SD1177 Date Calibrated 3/5/19
- vi. 0.300g/210L Mnf Guth Lot 19010 Exp 1/3/21
 - 1. Simulator S/N SD1088 Date Calibrated 3/5/19

5. Functional Tests (attached)

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

i. Acetone - Mnf Guth Lot 18370 Level 0.100 Exp 12/5/20

1. Simulator S/N SD1199 Date Calibrated 3/6/19

ii. Isopropanol - Mnf Guth Lot 18370 Level 0.100 Exp 12/5/20

1. Simulator S/N DR4161 Date Calibrated 3/7/19

iii. Negative Control - Mnf Guth Lot 18370 Level 0.100 Exp 12/5/20

1. Simulator S/N SD1202 Date Calibrated 3/5/19

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 9/12/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/11/2019
Time: 13:12:47

VERSIONS
DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.59 V PASSED
(0.96 V - 2.24 V)
Cooler Voltage = 1.65 V PASSED
(0.94 V - 2.20 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 540 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.153 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 = 0.089 0.69% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100676

Date: 09/11/2019
Time: 1:29 PM

Temperatures (°C)
Sample Cell: 48.6°C
Breath Tube: 47.8°C

Current Barometer 29.6 in
Volume (Ltr) 1.49

Settings
Lamp: 1.65 V
Bias: 79 V
Cooler: 1.65 V
Chopper: 539 Hz

Voltages (V)
Flow: 1.06 V
Detector: 0.023 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 10/26/2011
Time: 07:46:55

Ca	=	0.1000		
CAL	=	1.005681	0.800	<= CAL < 1.200
b1	=	0.0000	0.0000	<= b1 < 0.0040
b2	=	0.0043	0.0010	<= b2 < 0.0100
b3	=	0.0000	0.0000	<= b3 < 0.0040
Xq	=	0.0882	0.0500	<= Xq < 0.2000
a21	=	1.239164	1.050	<= a21 < 1.300
a31	=	0.566145	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/11/2019
Time: 13:29:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

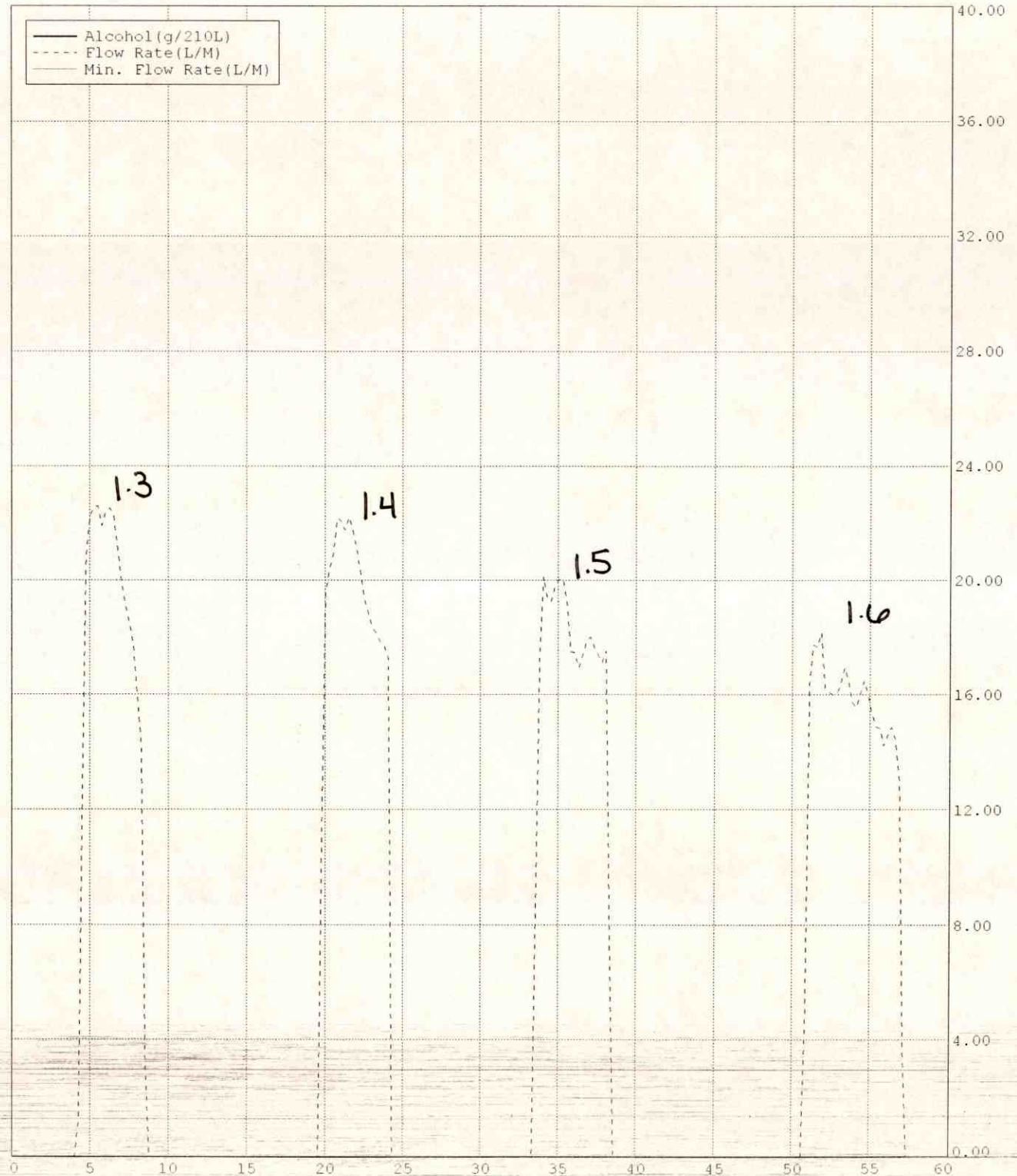
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:30
BLANK TEST	0.000	13:31
INTERNAL STANDARD	VERIFIED	13:31
EXTERNAL STANDARD	0.078	13:31
BLANK TEST	0.000	13:32
SUBJECT SAMPLE (Vol=1.62L)	0.000	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.078	13:34
BLANK TEST	0.000	13:35

BMB



LINEARITY CHECK

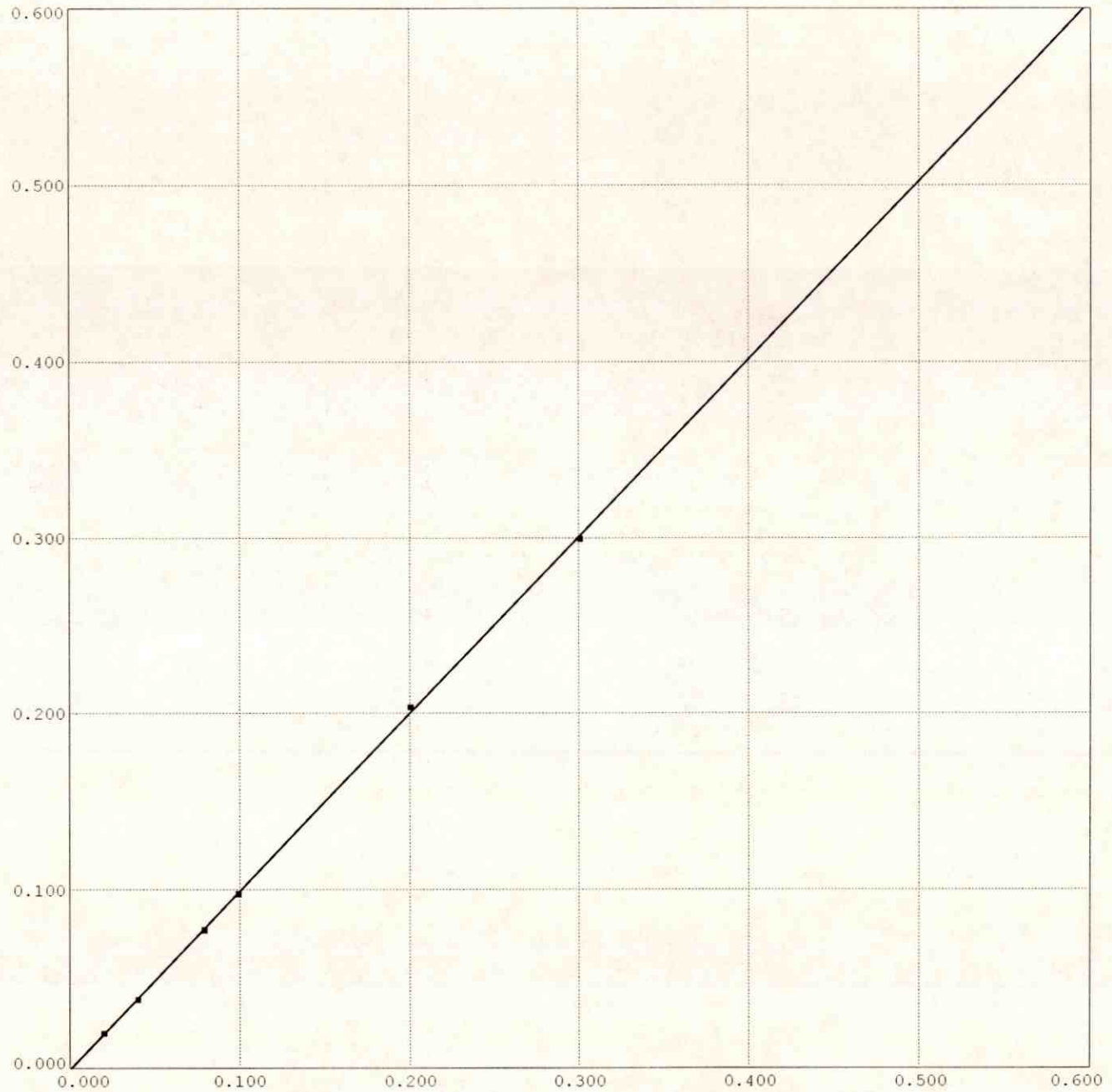
Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/11/2019
Time: 13:46:05

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0390	0.0000
0.079	0.0782	0.0004
0.099	0.0984	0.0005
0.200	0.2042	0.0004
0.300	0.3002	0.0004

SLOPE = 1.008581
R² = 0.999746



Handwritten signature: BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100676

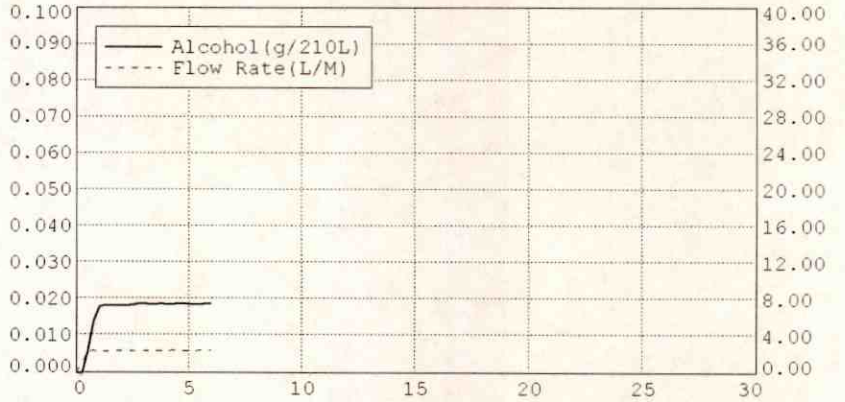
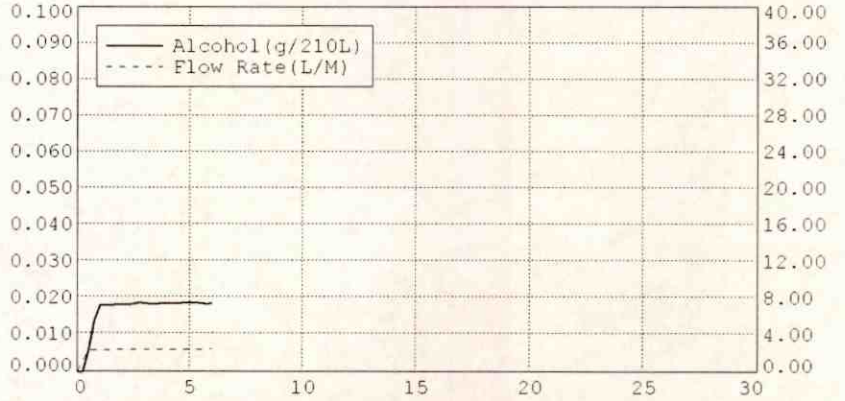
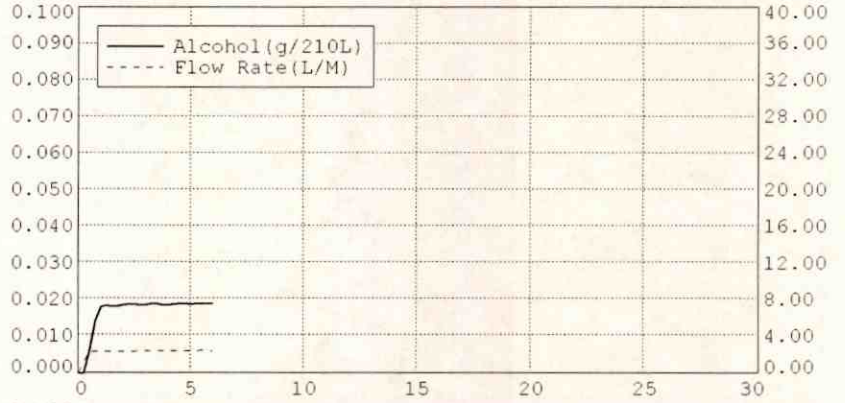
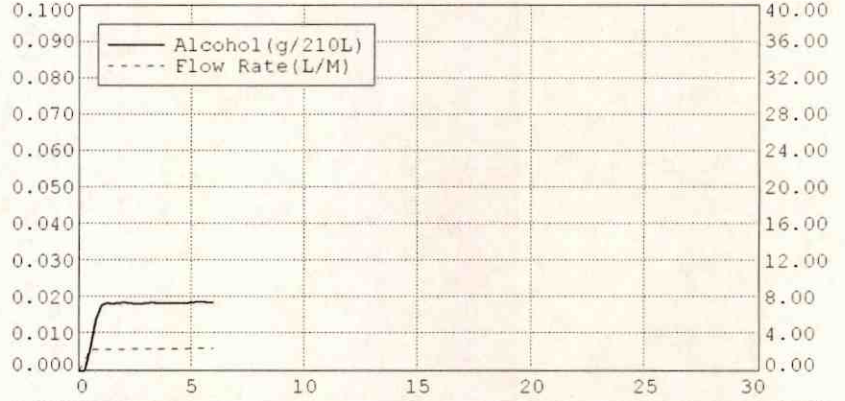
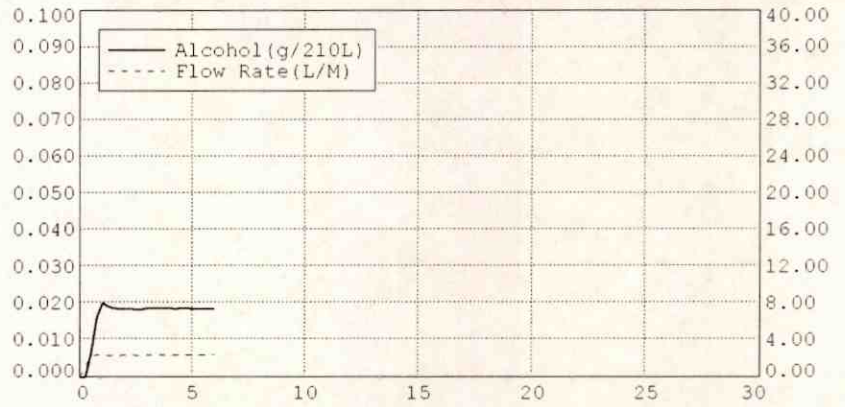
Date: 09/11/2019
Time: 13:46:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.63: 0.020
LOT #: AG805804
EXPIRATION: 02/27/2020
TANK PRESSURE: 537 psi

BLANK TEST	0.000	14:03
INTERNAL STANDARD	VERIFIED	14:03
EXTERNAL STANDARD	0.020	14:04
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.020	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.020	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.020	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.020	14:08
BLANK TEST	0.000	14:09

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100676

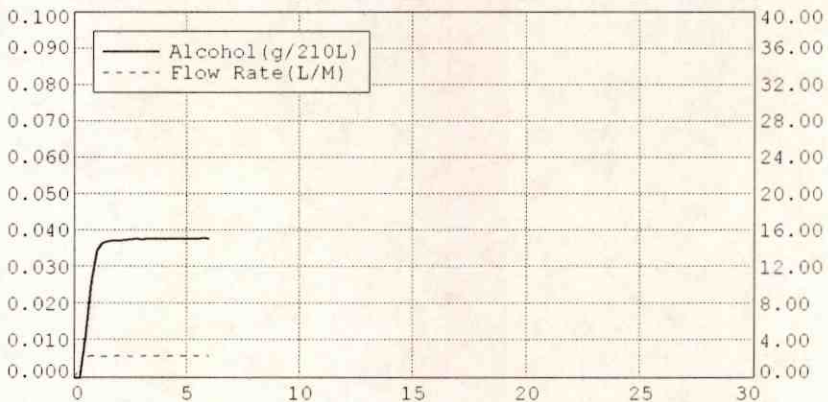
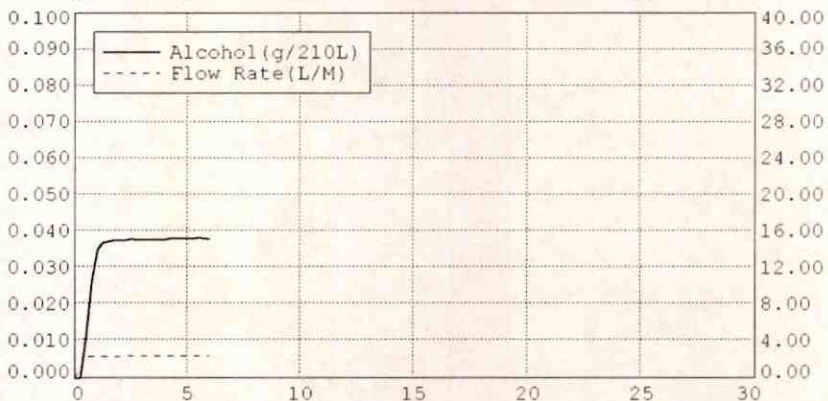
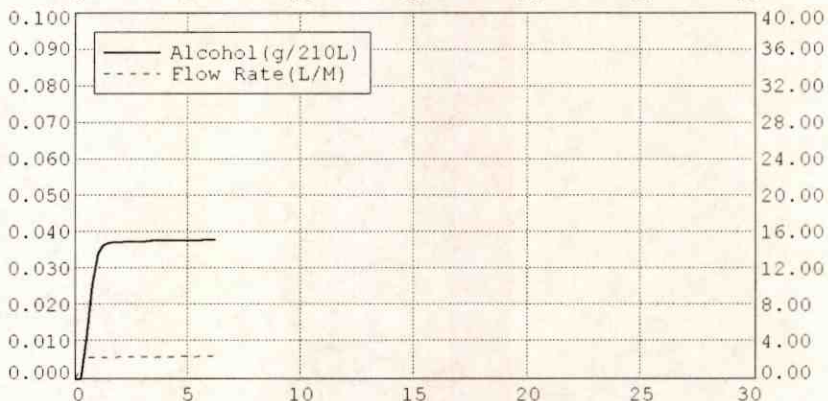
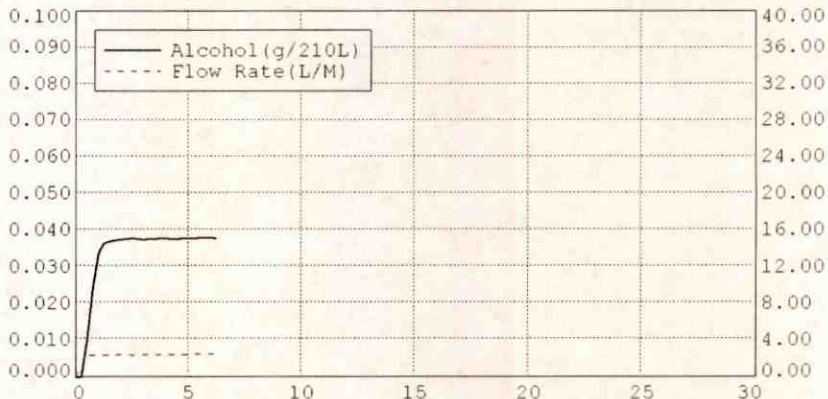
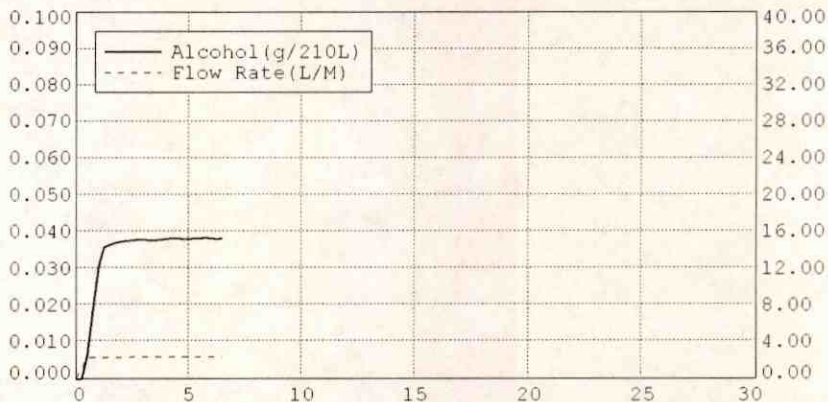
Date: 09/11/2019
 Time: 14:10:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.63: 0.040
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 518 psi

BLANK TEST	0.000	14:12
INTERNAL STANDARD	VERIFIED	14:12
EXTERNAL STANDARD	0.039	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.039	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.039	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.039	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.039	14:16
BLANK TEST	0.000	14:17

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100676

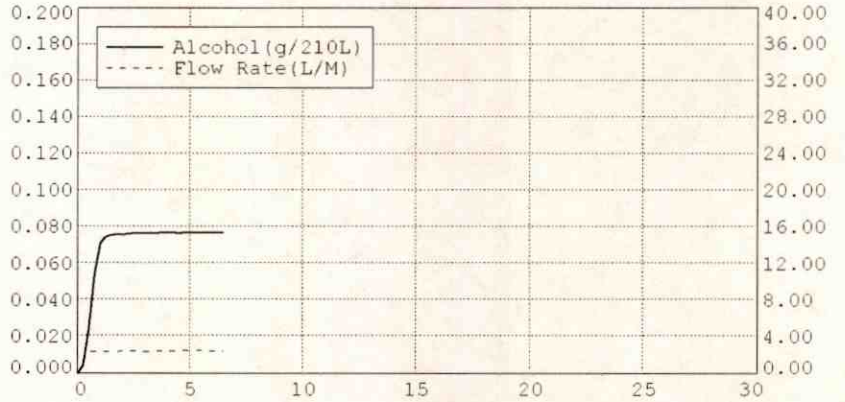
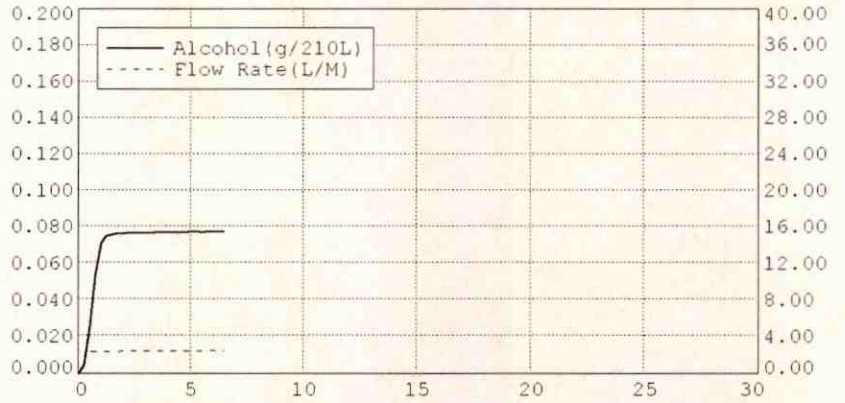
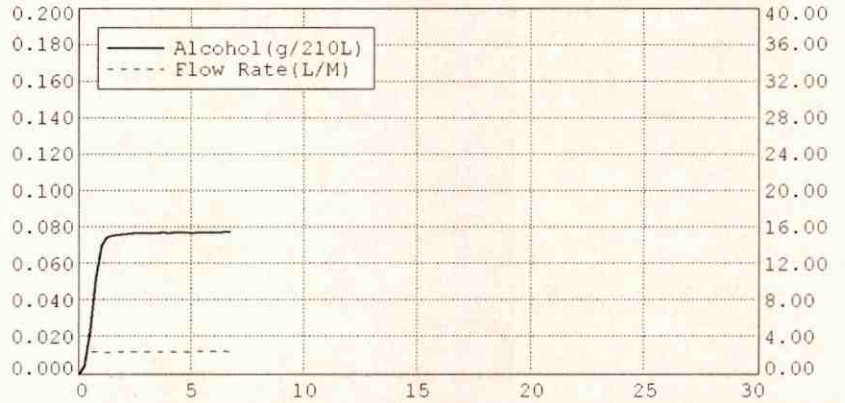
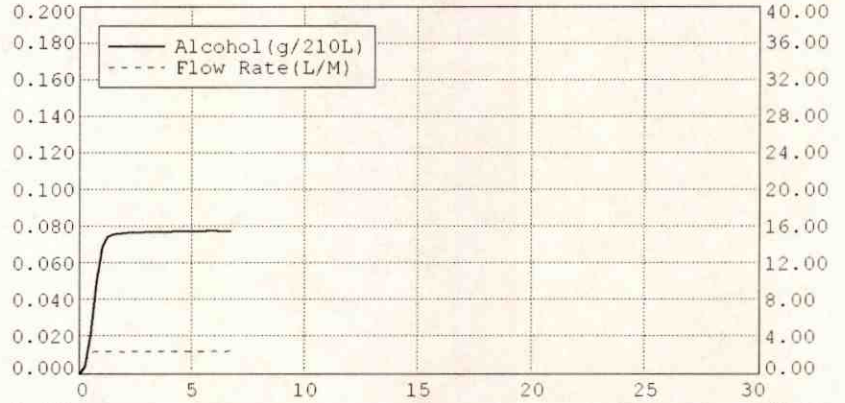
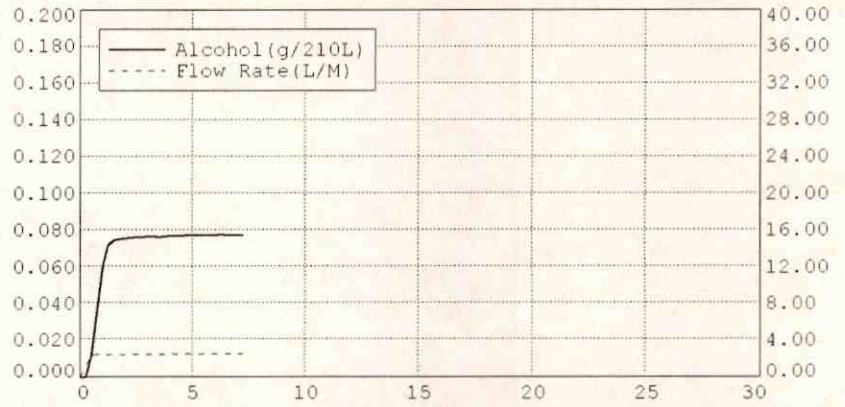
Date: 09/11/2019
 Time: 14:21:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.63: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 711 psi

BLANK TEST	0.000	14:22
INTERNAL STANDARD	VERIFIED	14:22
EXTERNAL STANDARD	0.078	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.079	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.078	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.078	14:26
BLANK TEST	0.000	14:26
EXTERNAL STANDARD	0.078	14:27
BLANK TEST	0.000	14:28

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100676

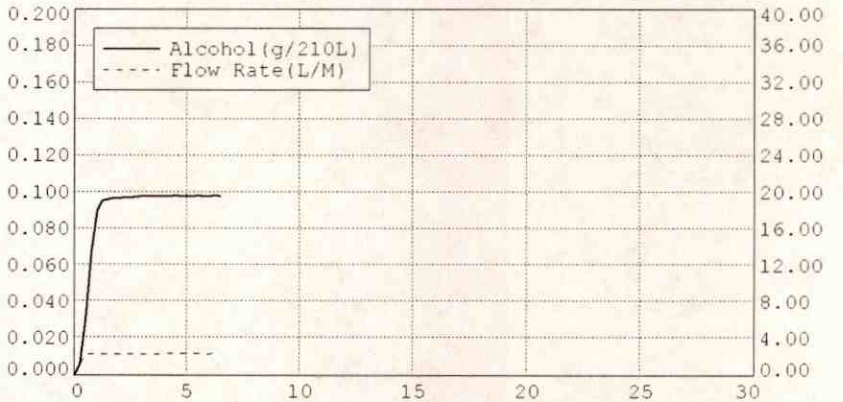
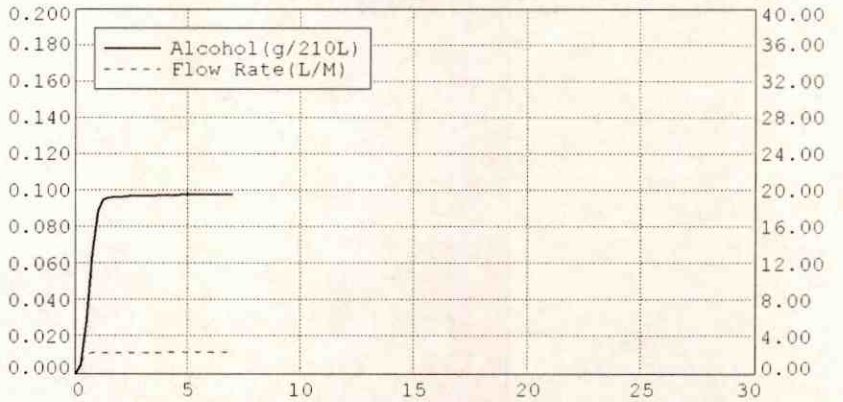
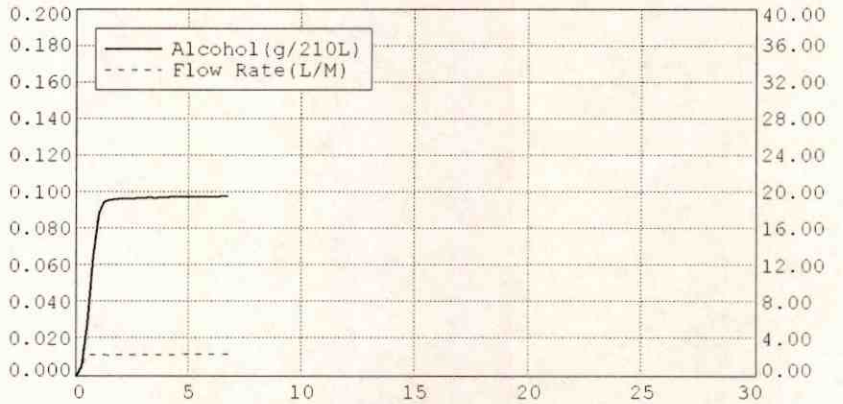
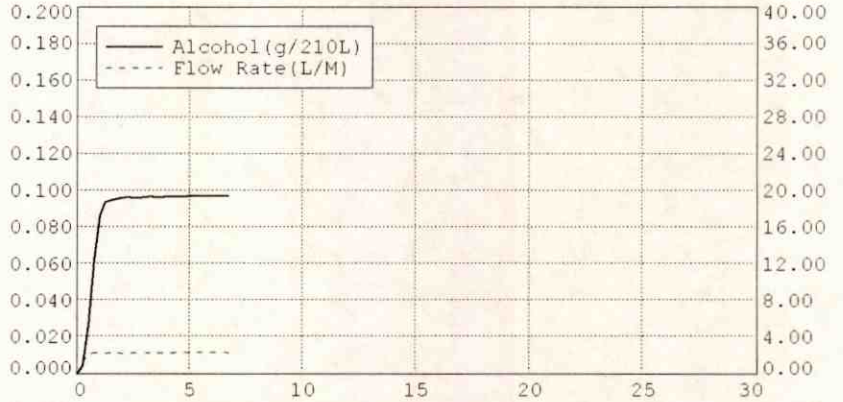
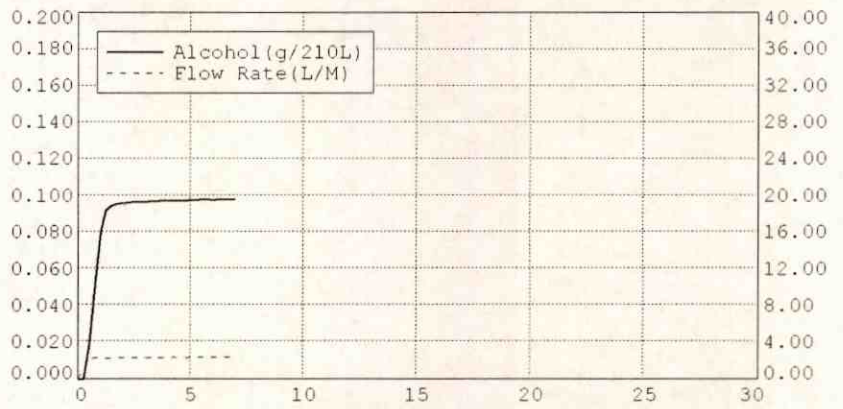
Date: 09/11/2019
Time: 14:30:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.62: 0.099
LOT #: AG805903
EXPIRATION: 02/28/2020
TANK PRESSURE: 414 psi

BLANK TEST	0.000	14:32
INTERNAL STANDARD	VERIFIED	14:32
EXTERNAL STANDARD	0.098	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.098	14:33
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.098	14:34
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.099	14:35
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.099	14:36
BLANK TEST	0.000	14:37

Average = 0.0984
Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

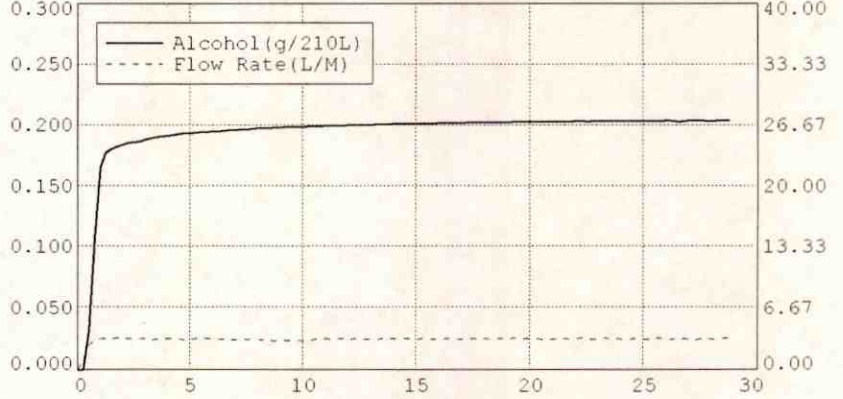
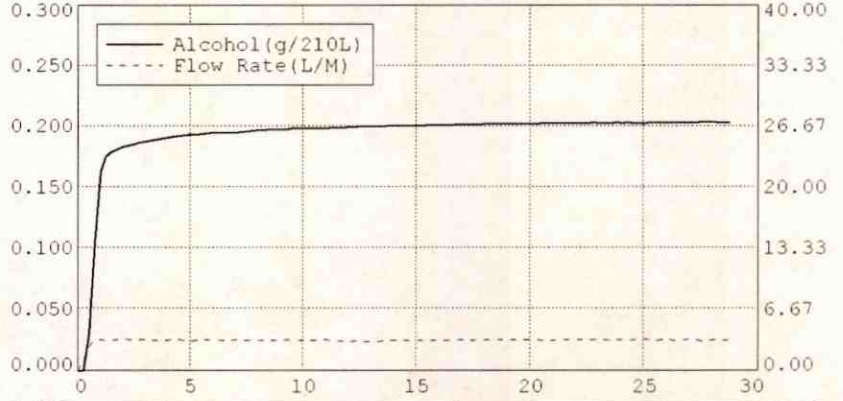
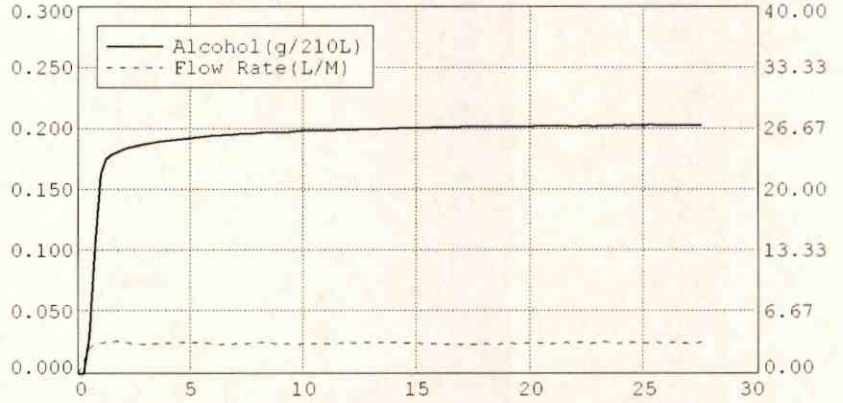
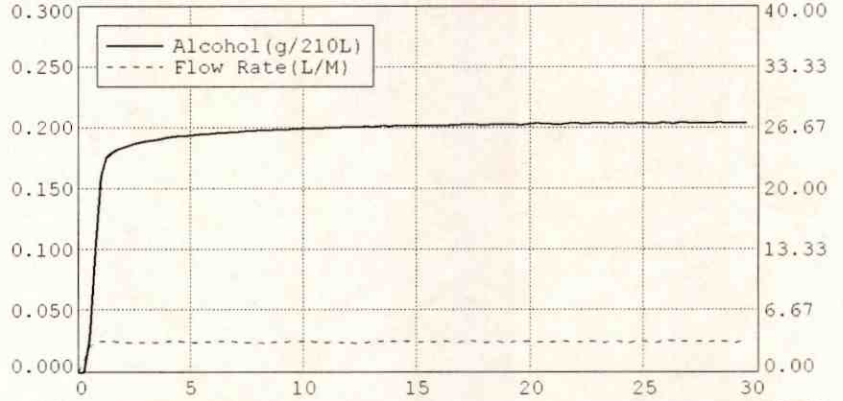
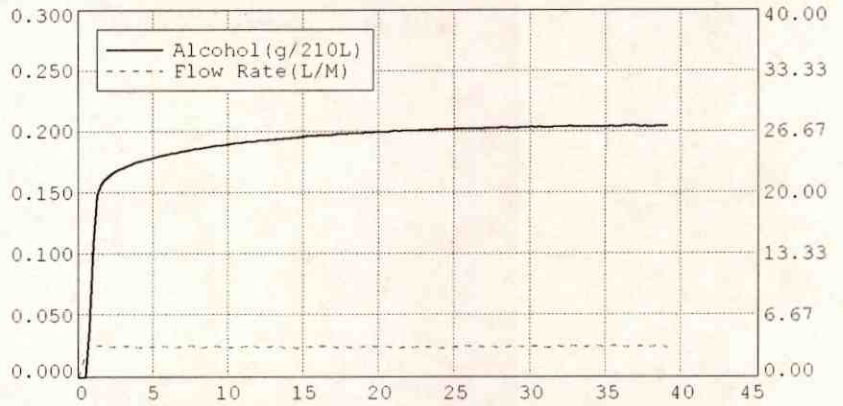
Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/11/2019
Time: 14:39:57

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.200
LOT #: 19040
EXPIRATION: 01/29/2021

BLANK TEST	0.000	14:41
INTERNAL STANDARD	VERIFIED	14:41
EXTERNAL STANDARD	0.205	14:41
BLANK TEST	0.000	14:42
EXTERNAL STANDARD	0.204	14:43
BLANK TEST	0.000	14:44
EXTERNAL STANDARD	0.204	14:45
BLANK TEST	0.000	14:45
EXTERNAL STANDARD	0.204	14:46
BLANK TEST	0.000	14:47
EXTERNAL STANDARD	0.204	14:48
BLANK TEST	0.000	14:48

Average = 0.2042
Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100676

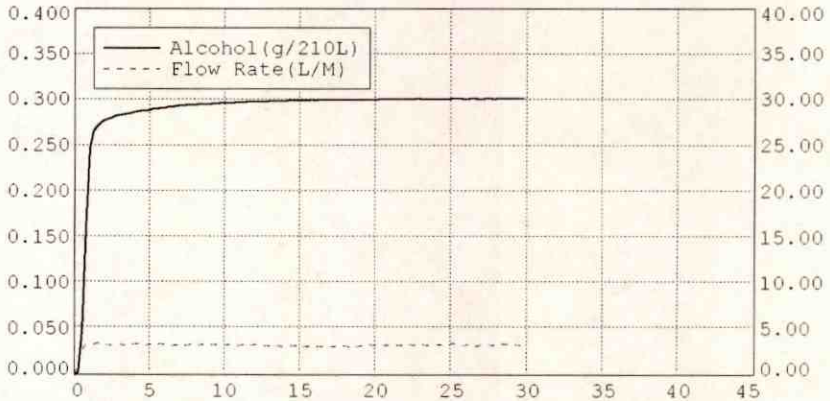
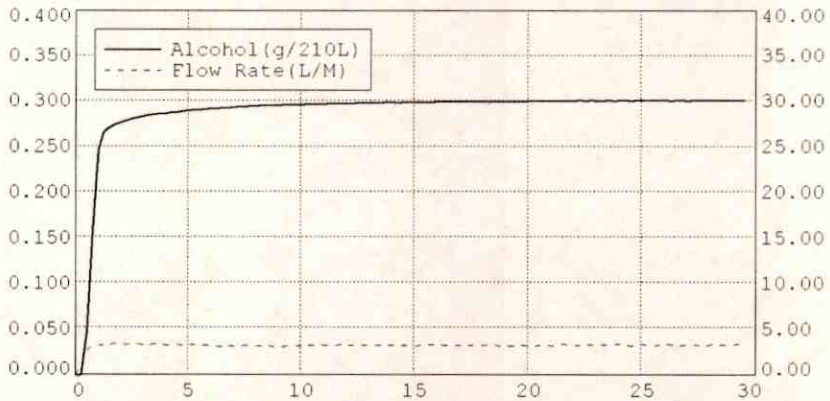
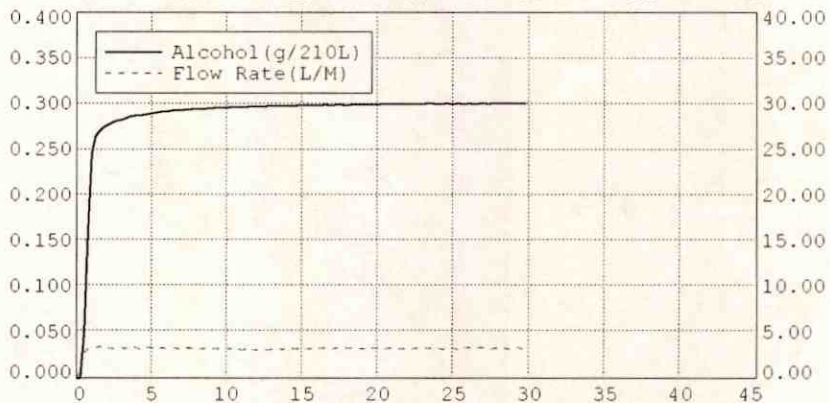
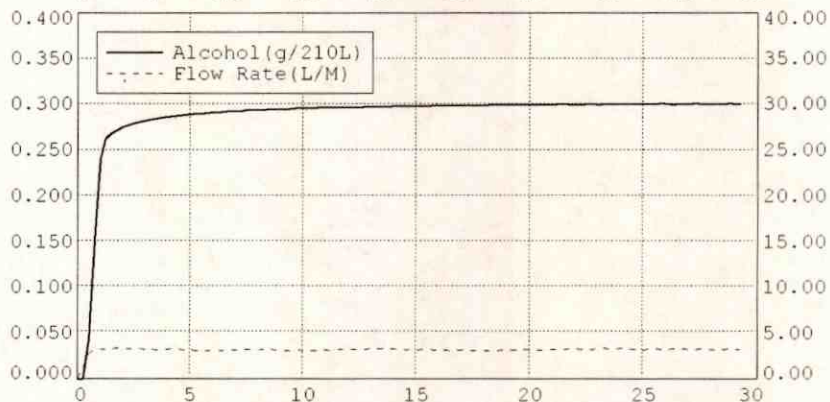
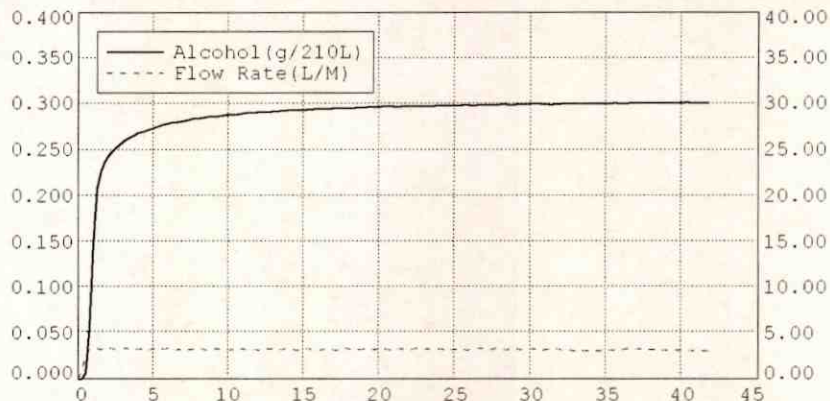
Date: 09/11/2019
 Time: 14:50:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: GUTH 19010
 EXPIRATION: 01/03/2021

BLANK TEST	0.000	14:51
INTERNAL STANDARD	VERIFIED	14:51
EXTERNAL STANDARD	0.300	14:52
BLANK TEST	0.000	14:53
EXTERNAL STANDARD	0.300	14:53
BLANK TEST	0.000	14:54
EXTERNAL STANDARD	0.300	14:55
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.300	14:56
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.301	14:58
BLANK TEST	0.000	14:59

Average = 0.3002
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/12/2019
Time: 07:24:19

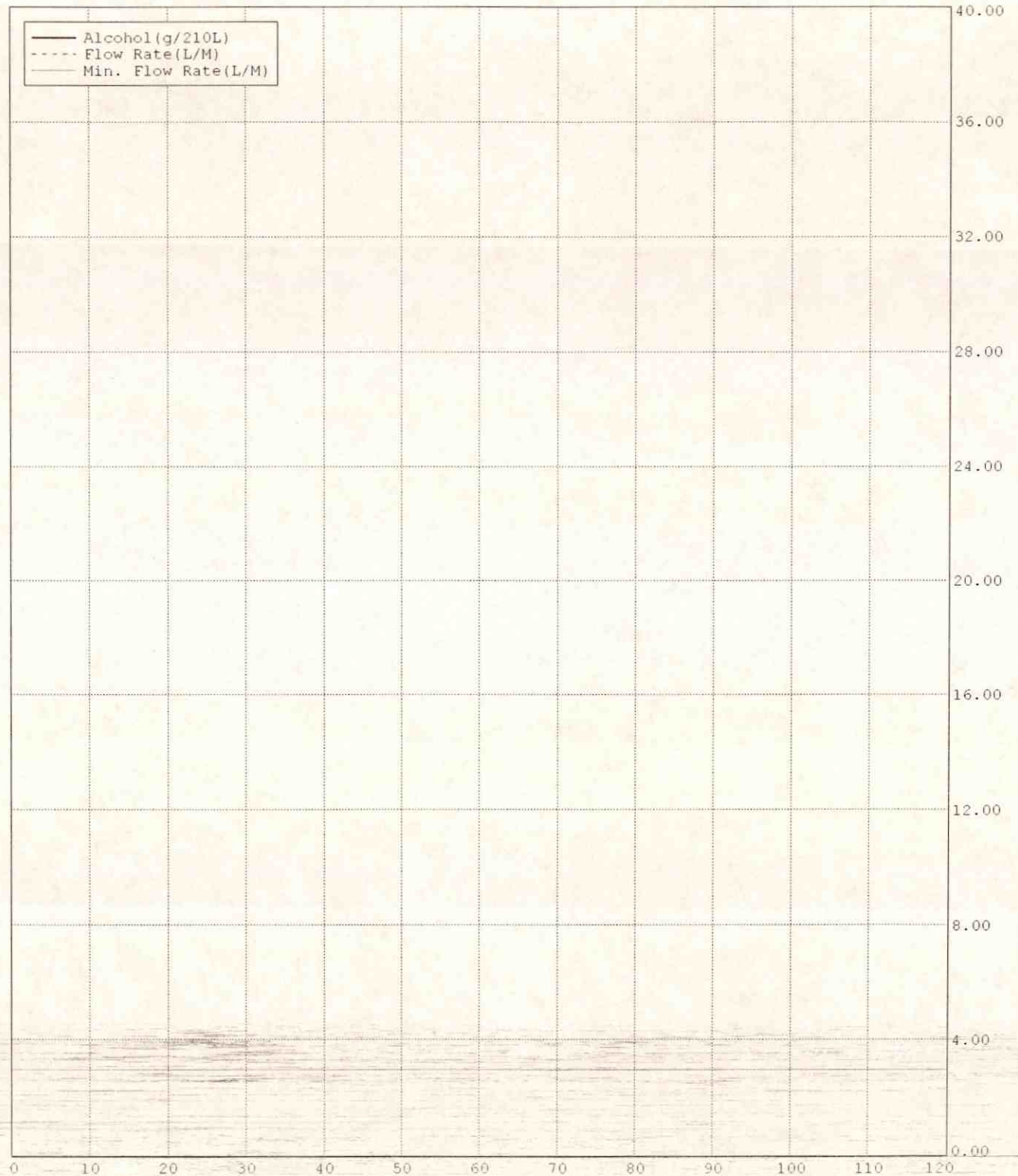

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:26
BLANK TEST	0.000	07:26
INTERNAL STANDARD	VERIFIED	07:26
EXTERNAL STANDARD	0.077	07:26
BLANK TEST	0.000	07:27
SUBJECT SAMPLE	INCOMPLETE	07:29



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/12/2019
Time: 07:31:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

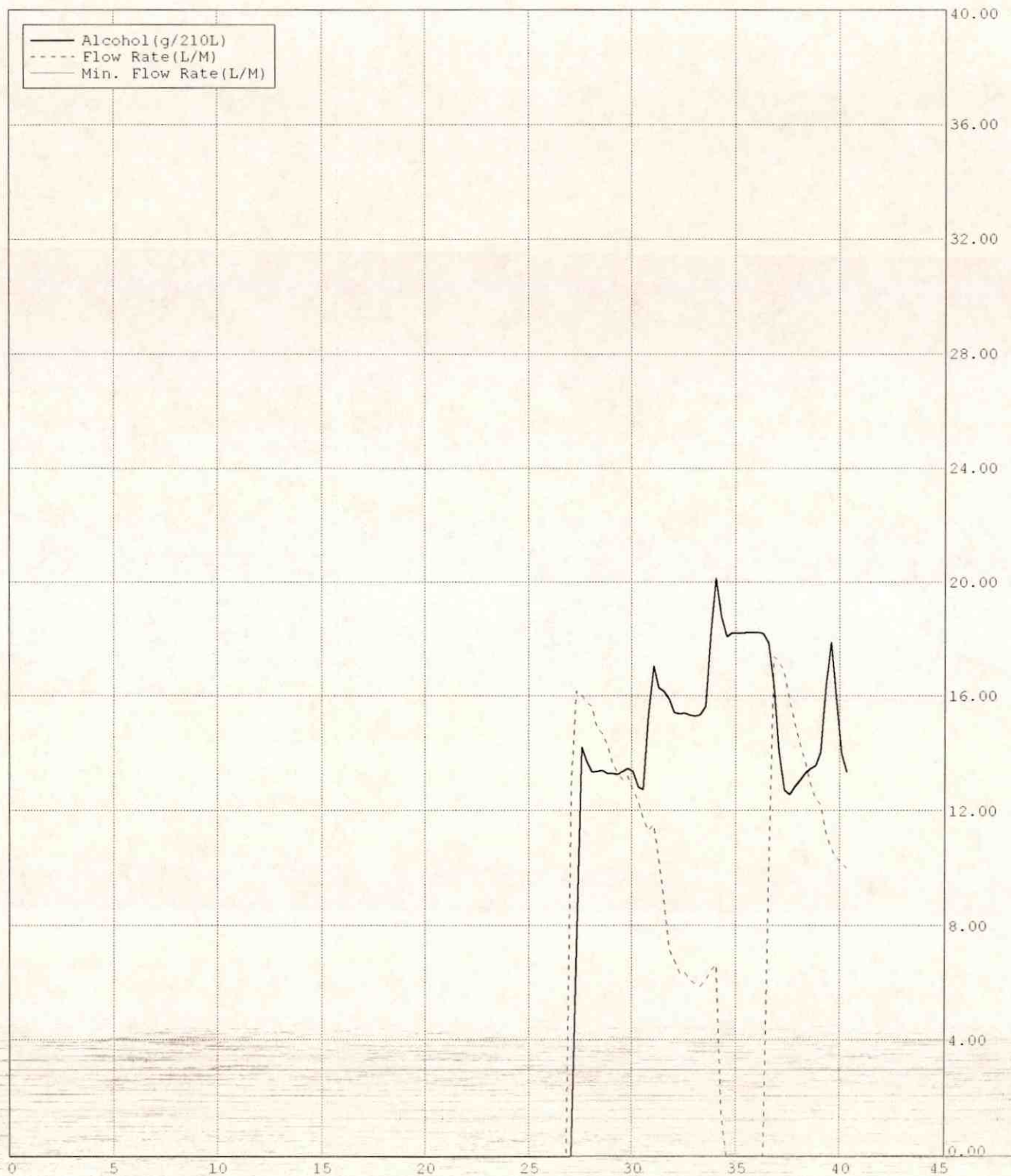
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:32
BLANK TEST	0.000	07:33
INTERNAL STANDARD	VERIFIED	07:33
EXTERNAL STANDARD	0.077	07:33
BLANK TEST	0.000	07:34
SUBJECT SAMPLE	INVALID	07:35

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/12/2019
Time: 07:37:04

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

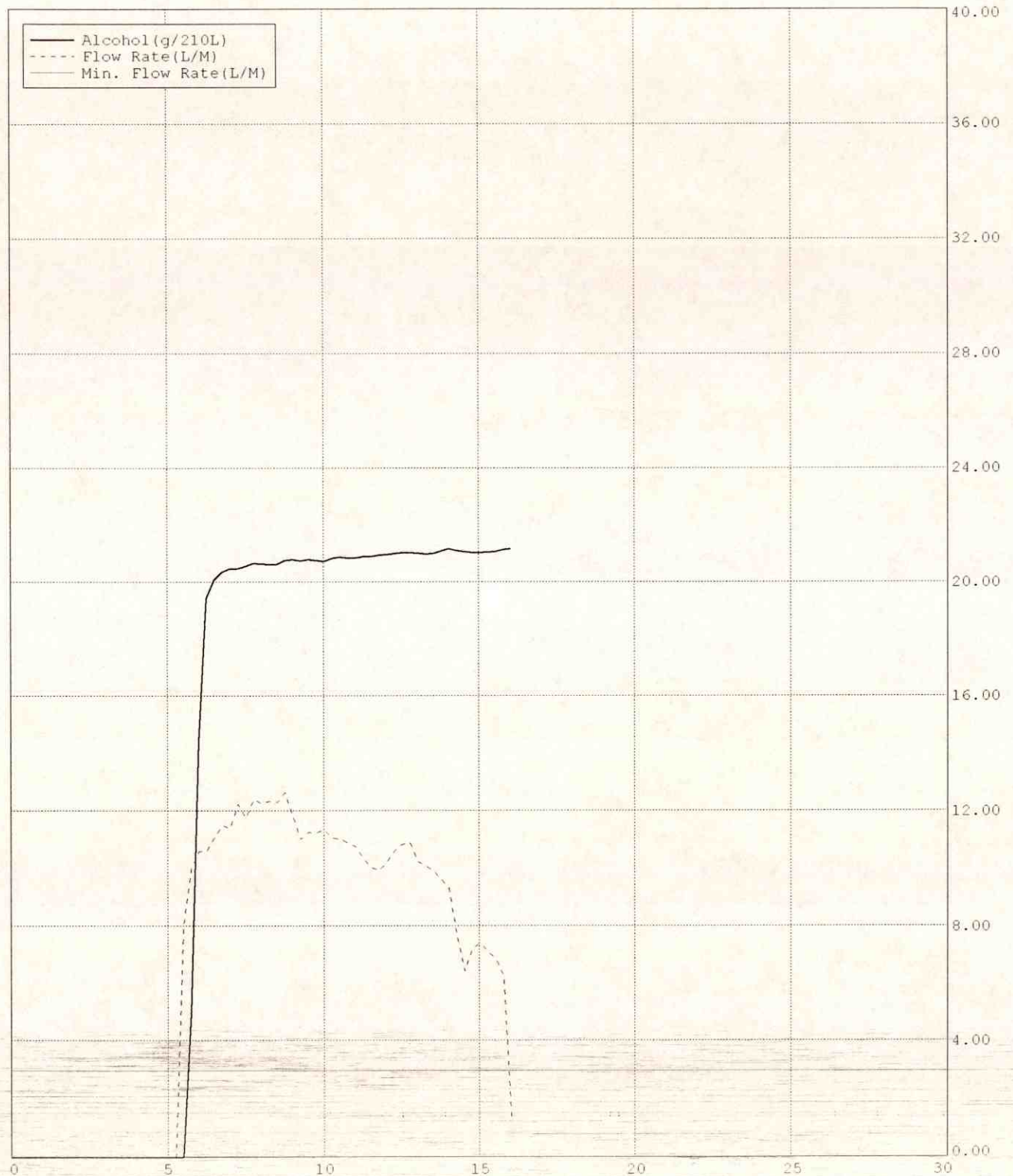
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:38
BLANK TEST	0.000	07:38
INTERNAL STANDARD	VERIFIED	07:38
Xq = 0.089 (1.09%)		
EXTERNAL STANDARD	0.077	07:39
X[1] = 0.0772 (0.0008) (0.0003)		
BLANK TEST	0.000	07:39
SUBJECT SAMPLE	XXX	07:40
X[1] = 0.1069 (-0.0232) (-0.0023)		

Interference Detected

Filter 2 Avg: 0.0010
Filter 3 Avg: 0.0007
BMB 9/12/19

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/12/2019
Time: 07:43:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

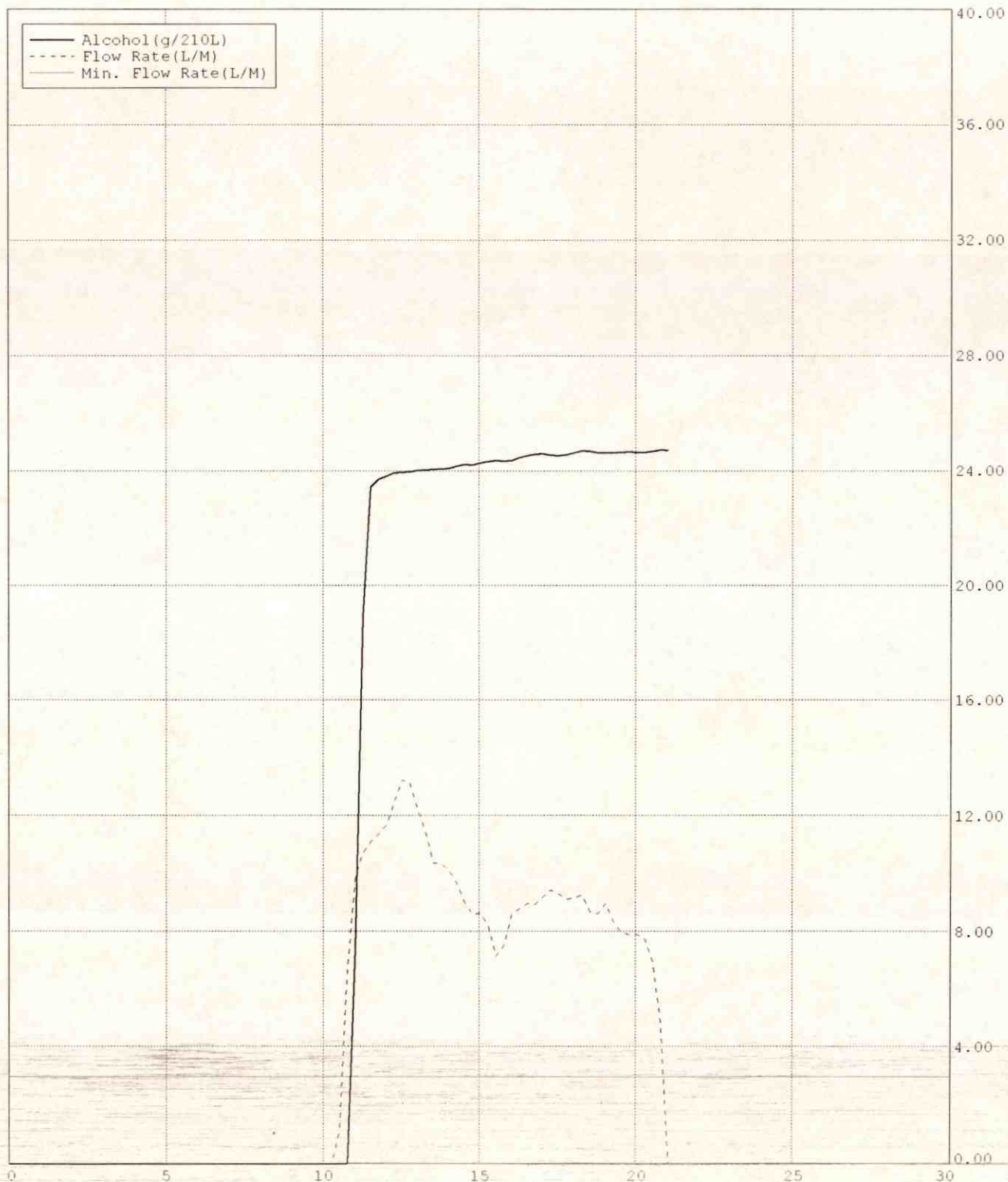
DEPT/AGENCY:
INTERFERE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:44
BLANK TEST	0.000	07:44
INTERNAL STANDARD	VERIFIED	07:45
Xq = 0.090 (2.08%)		
EXTERNAL STANDARD	0.077	07:45
X[1] = 0.0775 (0.0013) (0.0006)		
BLANK TEST	0.000	07:46
SUBJECT SAMPLE	XXX	07:46
X[1] = 0.1240 (-0.0303) (-0.0011)		

Interference Detected

Handwritten signature: BNB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/12/2019
Time: 07:49:44

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

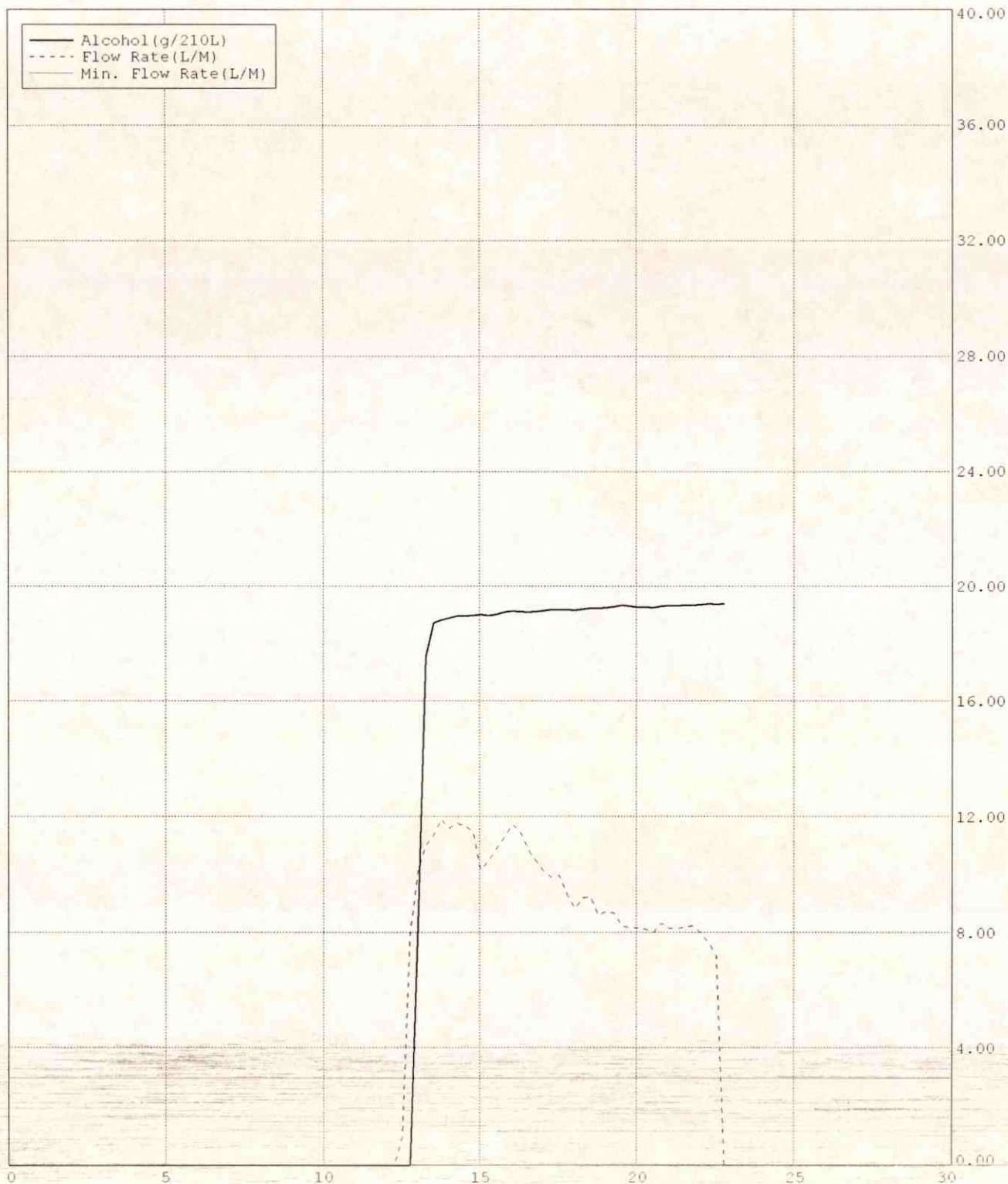
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:50
BLANK TEST	0.000	07:50
INTERNAL STANDARD	VERIFIED	07:51
Xq = 0.089 (1.48%)		
EXTERNAL STANDARD	0.077	07:51
X[1] = 0.0772 (0.0011) (0.0014)		
BLANK TEST	0.000	07:52
SUBJECT SAMPLE (Vol=1.60L)	0.097	07:52
X[1] = 0.0974 (0.0014) (-0.0010)		
BLANK TEST	0.000	07:53
EXTERNAL STANDARD	0.076	07:53
X[1] = 0.0765 (0.0007) (0.0006)		
BLANK TEST	0.000	07:54

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/12/2019
Time: 08:09:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

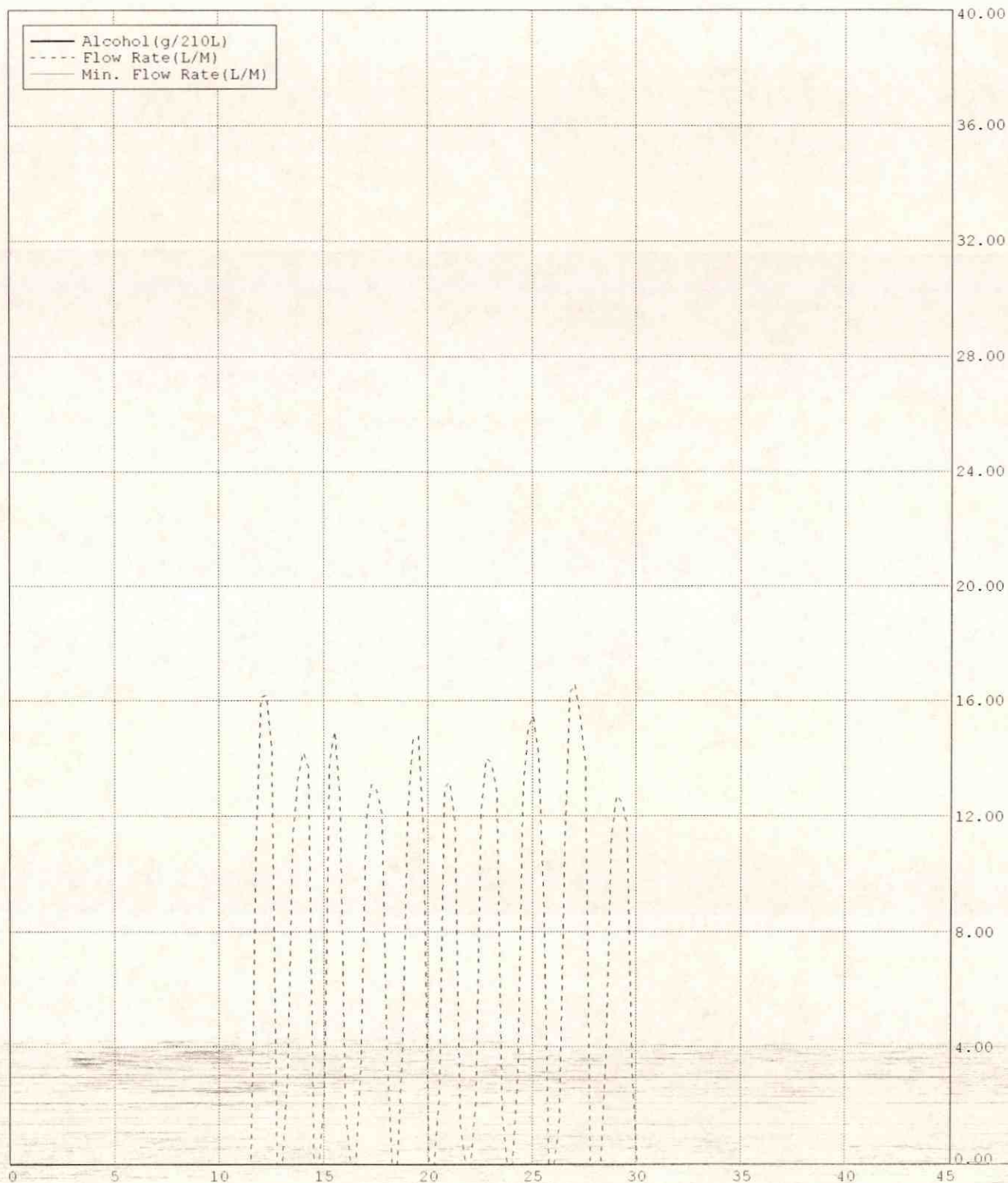
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:10
BLANK TEST	0.000	08:11
INTERNAL STANDARD	VERIFIED	08:11
EXTERNAL STANDARD	0.077	08:11
BLANK TEST	0.000	08:12
SUBJECT SAMPLE	XXX	08:12

Maximum Attempts Exceeded

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/12/2019
Time: 08:16:27

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

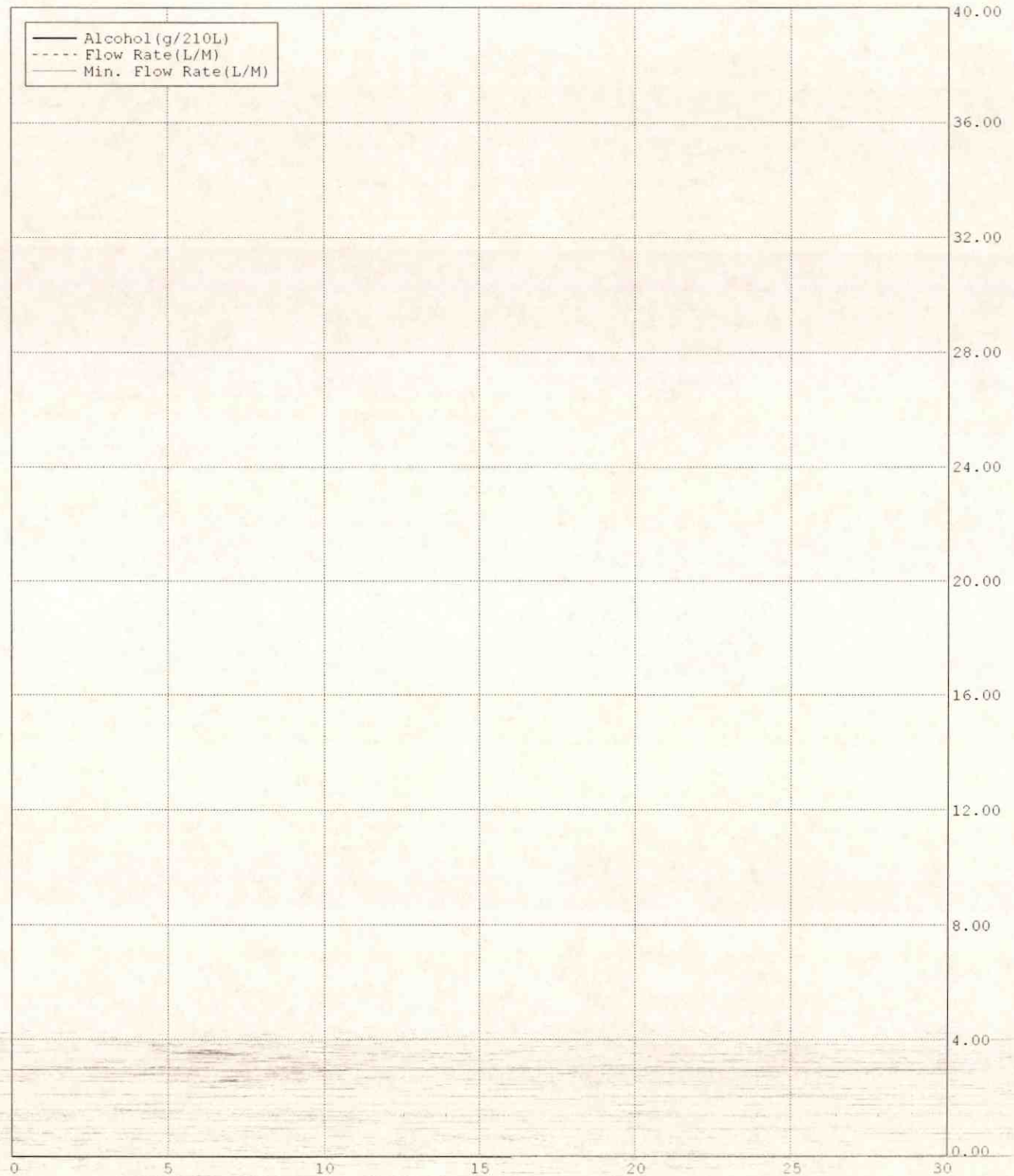
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:17
BLANK TEST	0.000	08:17
INTERNAL STANDARD	VERIFIED	08:18
EXTERNAL STANDARD	0.077	08:18
BLANK TEST	0.000	08:19

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100676

Date: 09/12/2019
Time: 08:36:52

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 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:40
BLANK TEST	0.000	08:40
INTERNAL STANDARD	VERIFIED	08:40
EXTERNAL STANDARD	0.077	08:40
BLANK TEST	0.000	08:41
SUBJECT SAMPLE (Vol=2.40L)	0.000	08:42
BLANK TEST	0.000	08:43
EXTERNAL STANDARD	0.078	08:43
BLANK TEST	0.000	08:44

PMB

