

# Alaska Scientific Crime Detection Laboratory

## DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100342 Analyst or Technician Name: Kailja Swisher

DataMaster DMT Calibration Start Date: 6/28/24

### Diagnostic Test

- Perform Diagnostic Test (View Details)
- Internal Standard Value  $\leq$  3.00%

*Supervised casework with  
Derek Watten JMW 07/11/24*

### Technician Screen and Calibration Factors

- Adjust Voltages (if needed)
  - Lamp (2.60 V Maximum)
  - Bias
  - Cooler (2.00 V Maximum)
  - Chopper Frequency
  - Detector Voltage (-0.100V to 0.100V)
- Set RFI Sensitivity
- Adjust internal barometer reading to match NIST-traceable barometer  
Barometer/Thermometer/Hygrometer S/N: 230307229  
Calibration Due Date: May 2, 2025
- Verify Volume Setting (1.50 L +/- 0.10 L), adjust if needed
- Print Technician Screen
- Print "Cal Factors"

Rejected calibration due to not completing linearity. Inadvertently did not click finish. KS 07/15/2024

### Minimum Volume Test

- Perform Minimum Volume (Subject) Test: 1.5 liters (1.3 L to 1.7 L)

### As Left Linearity Testing

Barometric Pressure (in Hg) 29.69 Temperature(C) 21.6 Relative Humidity(%) 39

Approved Concentrations (g/210L): 0.020, 0.040, 0.080, 0.100, 0.150, 0.300

### Functional Tests

- Incomplete
- Invalid
- Interference (Volatiles) - *Print with View Details*
- Maximum Attempts Exceeded
- Radio Frequency Interference (RFI)

1. Acetone Reagent Lot Number: 20240501KS Expiration Date: 8/1/24  
Simulator S/N: SD1088 Thermometer Verification Performed?
2. Isopropanol Reagent Lot Number: 20240501MNC Expiration Date: 8/1/24  
Simulator S/N: DR4161 Thermometer Verification Performed?
3. Negative (Ethanol Only) Lot Number: 224P41201 Expiration Date: 8/1/24  
Simulator S/N: SD1198 Thermometer Verification Performed?

Calibrated External Thermometer S/N: 230631106

Calibration Due Date: 9/19/2025

### Administrative

- Verify Stylus Calibration
- Reset Options
- Clear Memory
- Verification of Calibration (VOC)
- Perform Non-Drinking Subject Test
- Upload Instrument
- Remove Dry Gas Tank Before Shutdown
- Add Ready for Tech Review Note

### Completion

Lab Work End Date: 6/28/24

Data Interpretation Date (Technician): \_\_\_\_\_ (if applicable)

Data Interpretation Date (Analyst): KS 6/28/24

All printed copies are uncontrolled.

Approved by: Chemistry Supervisor

DIAGNOSTIC RECORD

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 06/28/2024  
Time: 09:09:35

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 46.1°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.65 V PASSED  
(0.99 V - 2.31 V)  
Cooler Voltage = 1.61 V PASSED  
(0.97 V - 2.25 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 534 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.252 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  
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.085 0.00% (0.00% - 4.00%) PASSED

Technician Screen

-----  
DATAMASTER dmt: 100342  
-----

Date: 06/28/2024  
Time: 9:24 AM

Temperatures (°C)  
Sample Cell: 48.7°C  
Breath Tube: 46.3°C

Current Barometer 29.7 in  
Volume (Ltr) 1.53

Settings  
Lamp: 1.65 V  
Bias: 80 V  
Cooler: 1.66 V  
Chopper: 534 Hz

Voltages (V)  
Flow: 1.02 V  
Detector: -0.003 V

REJECTED

CALIBRATION FACTORS

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 06/19/2024  
Time: 10:31:28

OPERATOR NAME:  
KAIJA SWISHER  
CERTIFICATE #: 10746

Ca = 0.1000  
CAL = 0.985943    0.800 <= CAL < 1.200  
b1 = 0.0008    0.0000 <= b1 < 0.0040  
b2 = 0.0045    0.0010 <= b2 < 0.0100  
b3 = 0.0010    0.0000 <= b3 < 0.0040  
Xq = 0.0855    0.0500 <= Xq < 0.2000  
a21 = 1.186599    1.050 <= a21 < 1.300  
a31 = 0.494774    0.300 <= a31 < 0.800

REJECTED

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 06/28/2024  
Time: 09:26:06

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
KAIJA SWISHER  
OPERATOR'S #: 10746

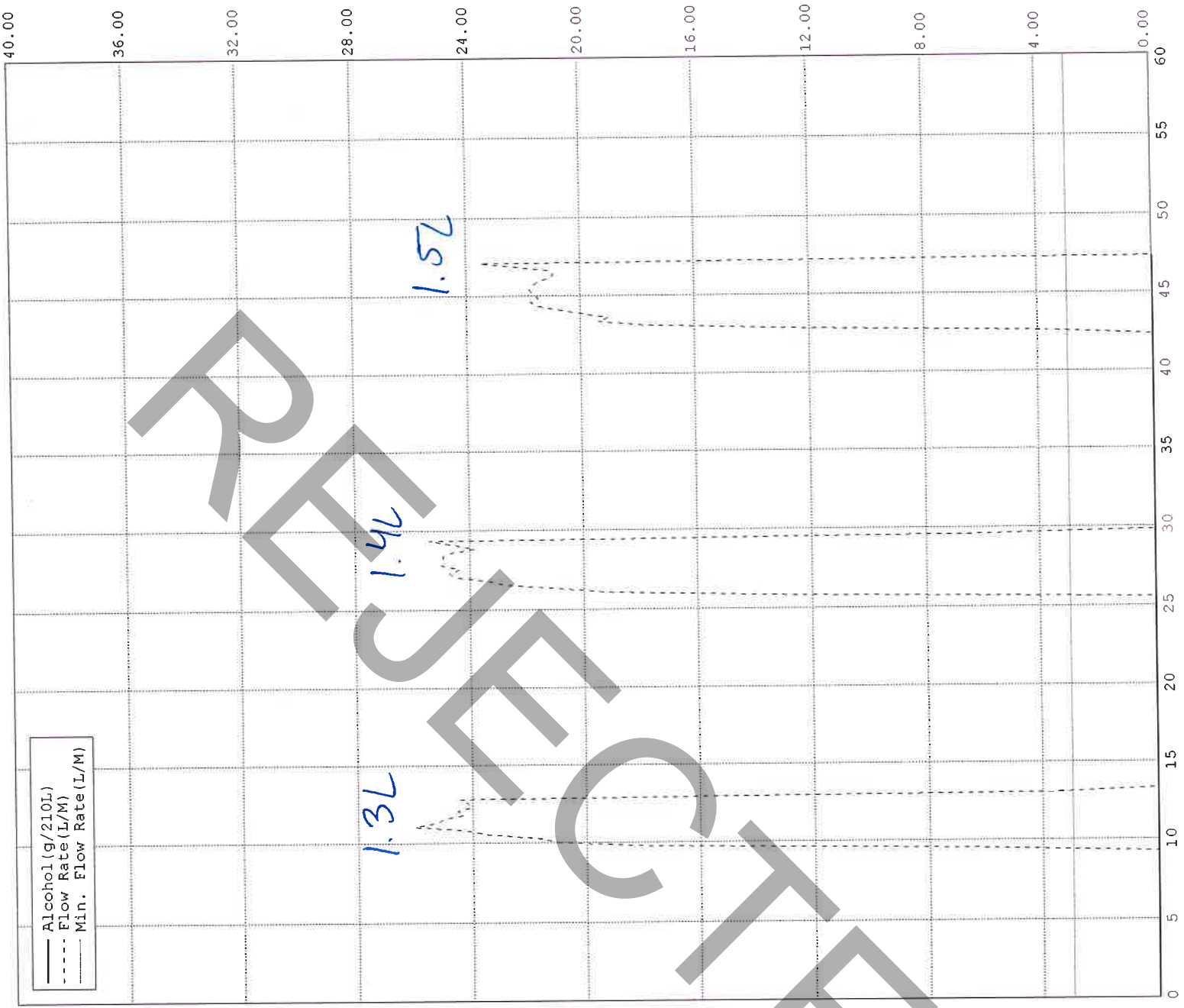
DEPT/AGENCY:  
MINIMUM VOLUME TEST  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.69: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	09:27
BLANK TEST	0.000	09:27
INTERNAL STANDARD	VERIFIED	09:27
EXTERNAL STANDARD	0.079	09:27
BLANK TEST	0.000	09:28
SUBJECT SAMPLE (Vol=1.56L)	0.000	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.080	09:30
BLANK TEST	0.000	09:31

KS



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 06/28/2024  
Time: 09:34:32

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
KAIJA SWISHER  
OPERATOR'S #: 10746

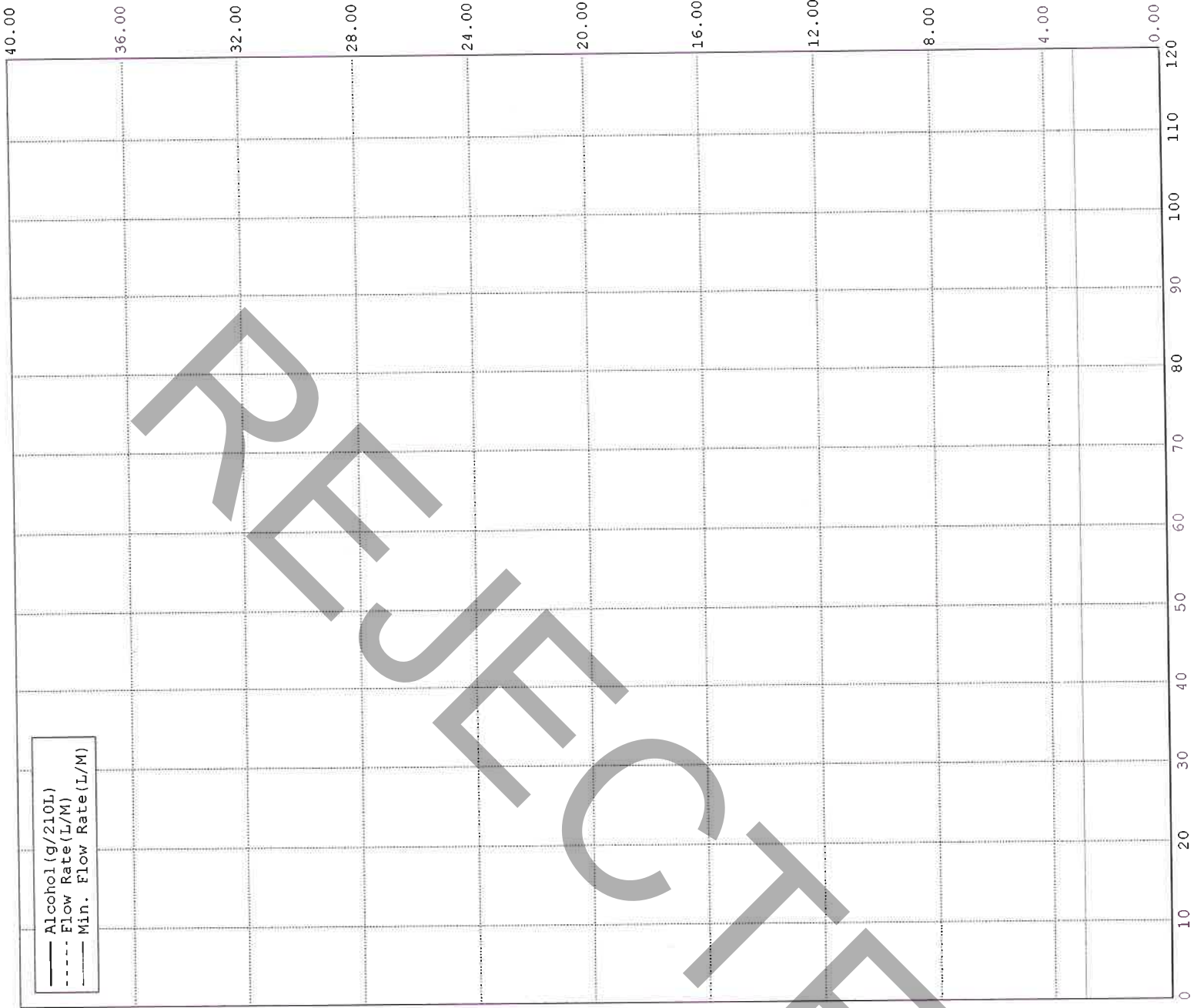
DEPT/AGENCY:  
INCOMPLETE  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.69: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK PASSED 09:35  
BLANK TEST 0.000 09:35  
INTERNAL STANDARD VERIFIED 09:35  
EXTERNAL STANDARD 0.080 09:36  
BLANK TEST 0.000 09:36  
SUBJECT SAMPLE INCOMPLETE 09:38

KS



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 06/28/2024  
Time: 09:53:20

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
KAIJA SWISHER  
OPERATOR'S #: 10746

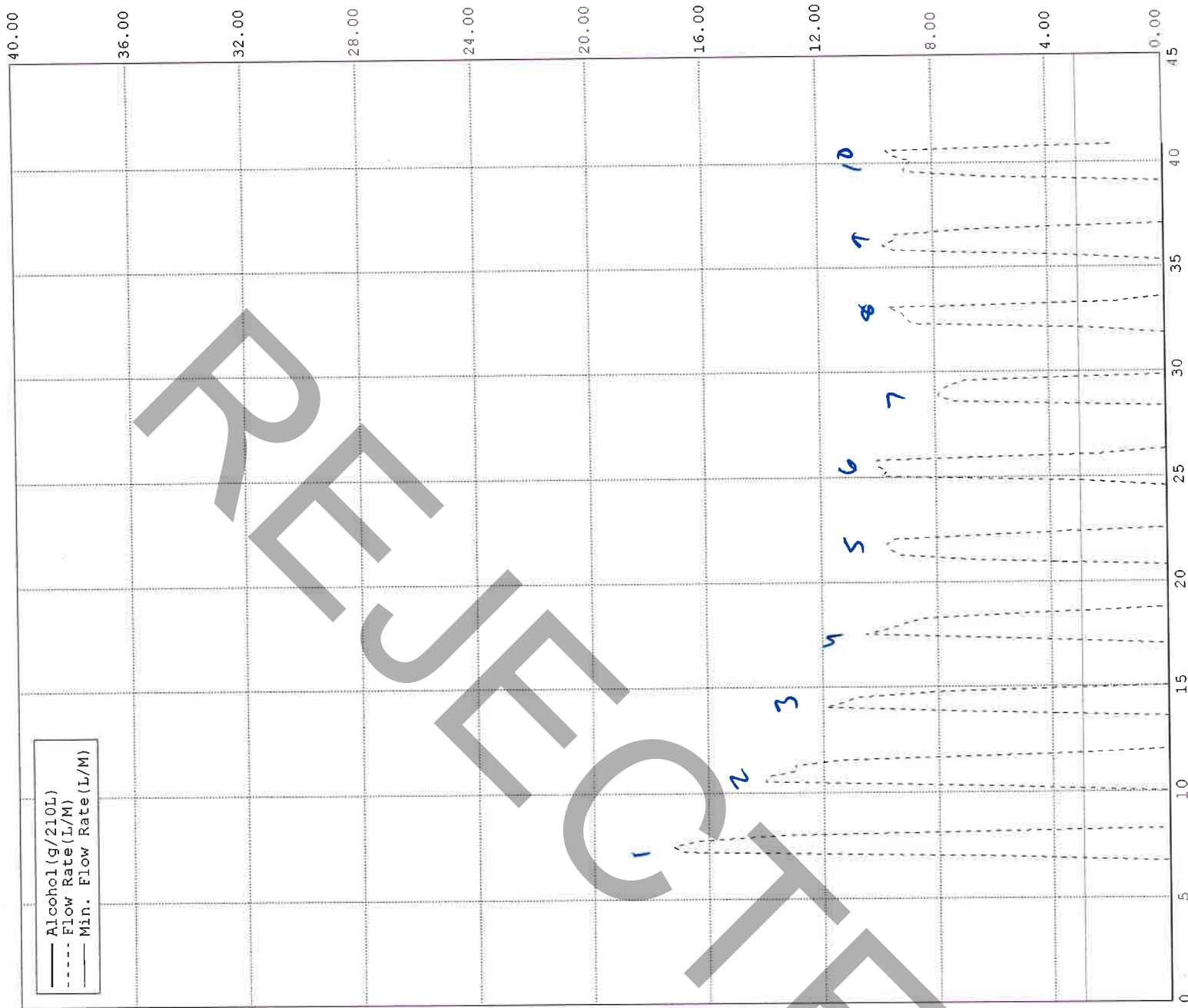
DEPT/AGENCY:  
MAXIMUM ATTEMPTS EXCEEDED  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.69: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK PASSED 09:54  
BLANK TEST 0.000 09:54  
INTERNAL STANDARD VERIFIED 09:54  
EXTERNAL STANDARD 0.079 09:54  
BLANK TEST 0.000 09:55  
SUBJECT SAMPLE XXX 09:56

Maximum Attempts Exceeded

KS



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100342

Date: 06/28/2024

Time: 09:58:56

SUBJECT NAME:

TEST TEST

LICENSE #: XXX

OPERATOR NAME:

KAIJA SWISHER

OPERATOR'S #: 10746

DEPT/AGENCY:

INVALID

CASE/REPORT: XXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.68: 0.079

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK

PASSED 10:00

0.000 10:00

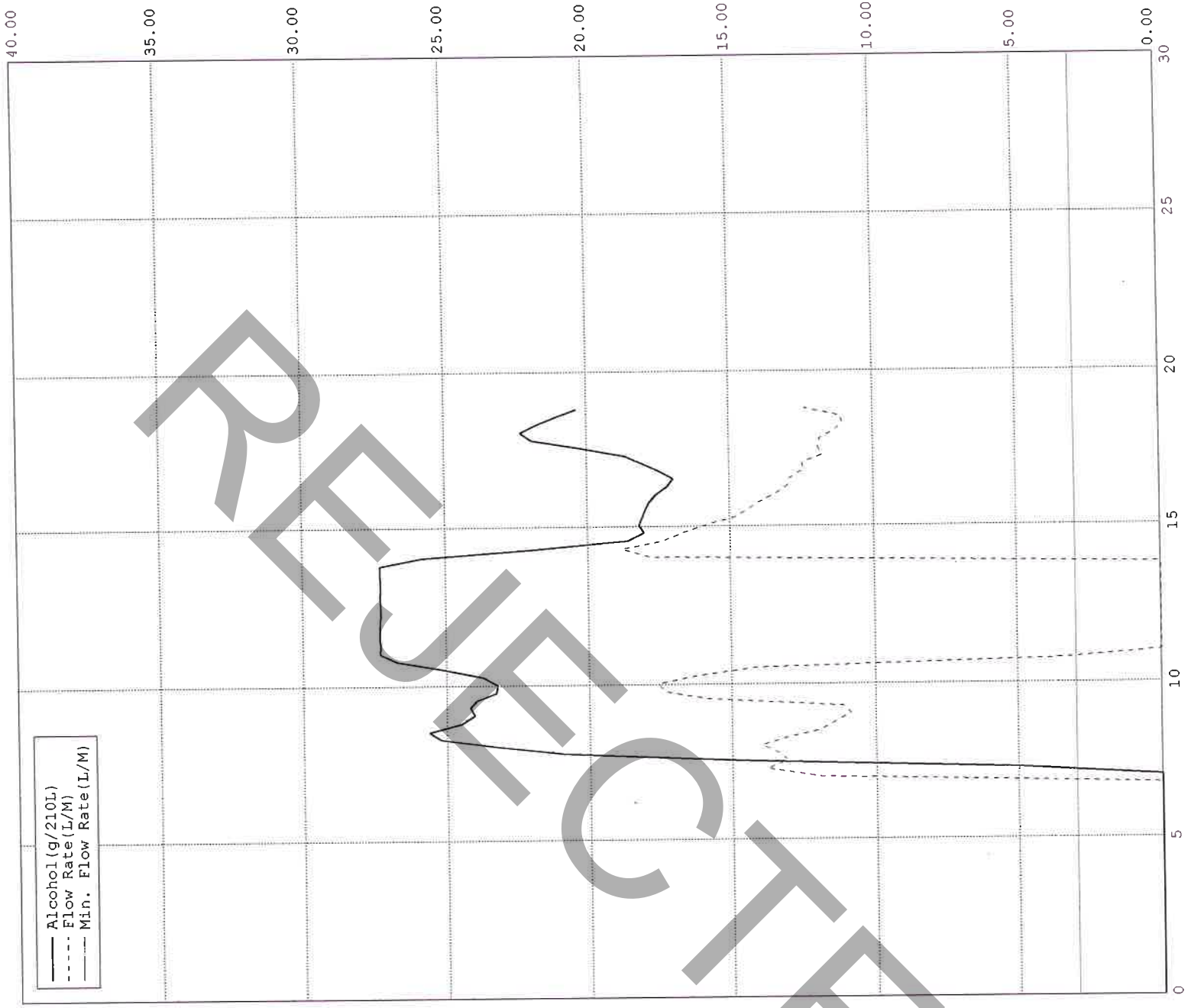
VERIFIED 10:00

0.080 10:00

0.000 10:01

INVALID 10:02

Alcohol (g/210L)  
Flow Rate (L/M)  
Min. Flow Rate (L/M)



125



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 06/28/2024  
Time: 10:04:55

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
KAIJA SWISHER  
OPERATOR'S #: 10746

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

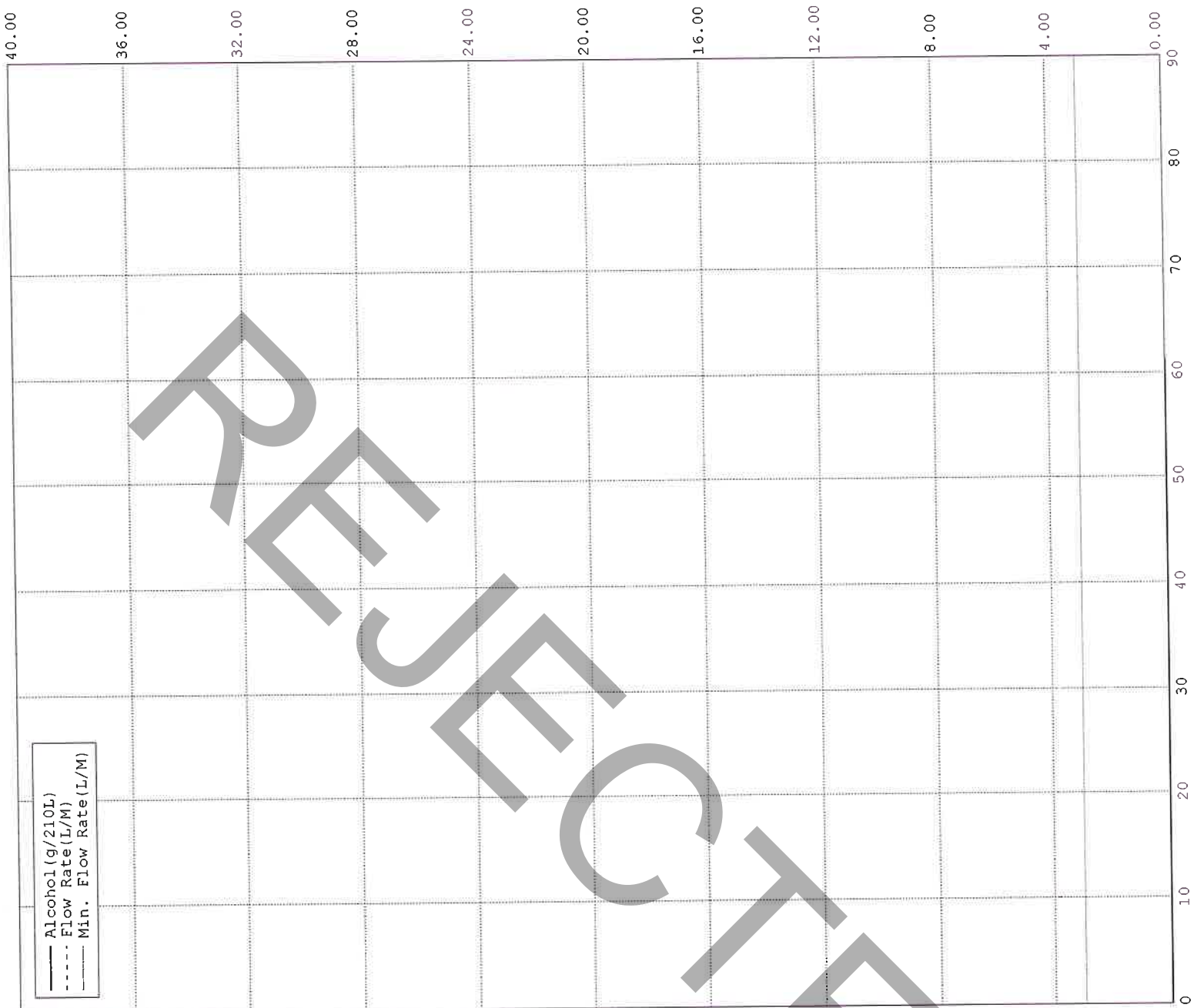
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.69: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK PASSED 10:06  
BLANK TEST 0.000 10:06  
INTERNAL STANDARD VERIFIED 10:06  
EXTERNAL STANDARD 0.079 10:06  
BLANK TEST 0.000 10:07

RFI DETECTED

RFI



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 06/28/2024  
Time: 10:49:37

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
KAIJA SWISHER  
OPERATOR'S #: 10746

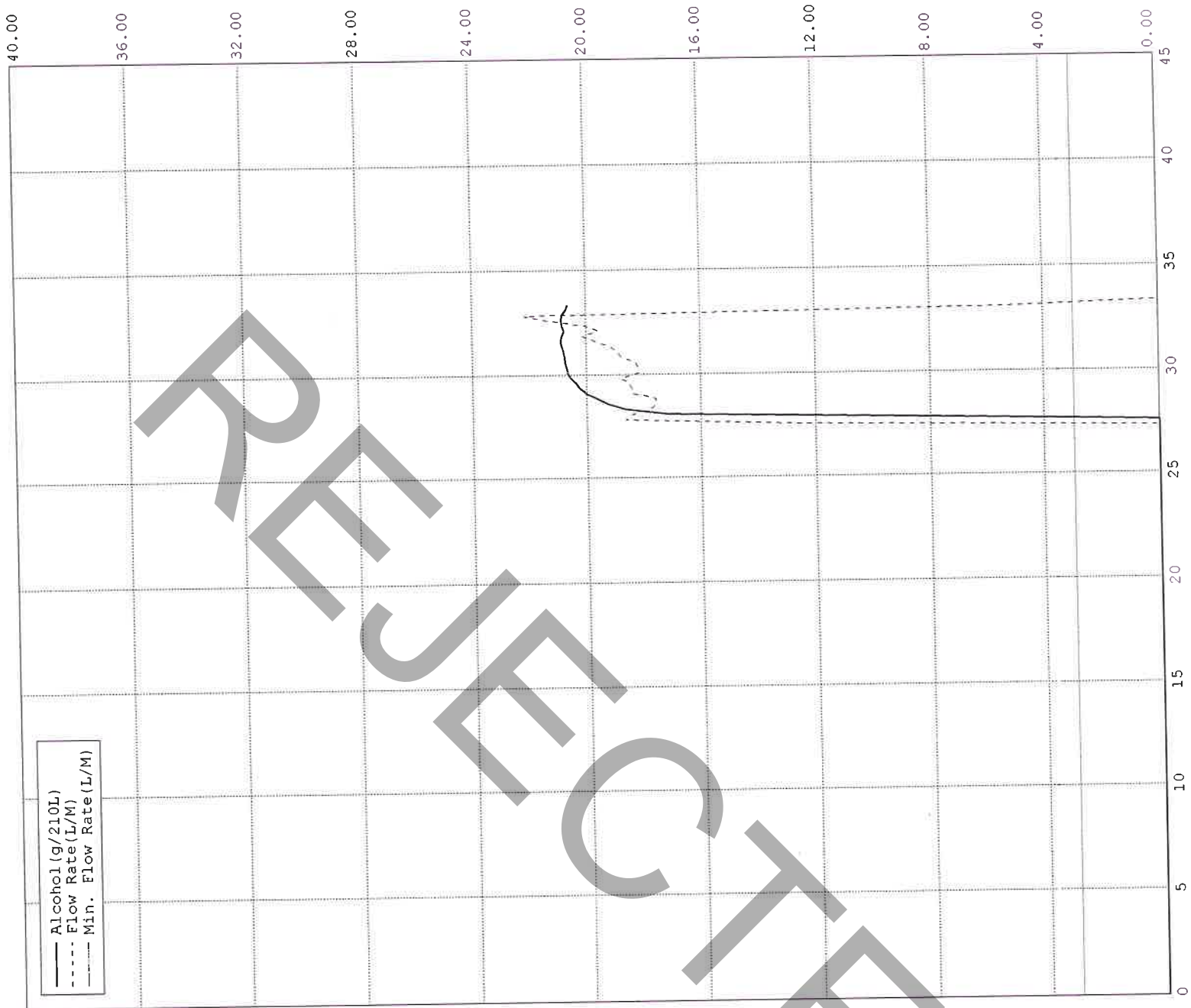
DEPT/AGENCY:  
INTERFERENCE - ACETONE  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.68: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	10:51
BLANK TEST	0.000	10:51
INTERNAL STANDARD	VERIFIED	10:51
Xq = 0.085 (0.51%)		
EXTERNAL STANDARD	0.079	10:51
X[1] = 0.0792 (0.0003) (0.0017)		
BLANK TEST	0.000	10:52
SUBJECT SAMPLE	XXX	10:53
X[1] = 0.1038 (-0.0140) (0.0027)		

Interference Detected

KS



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 06/28/2024  
Time: 10:56:38

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
KAIJA SWISHER  
OPERATOR'S #: 10746

DEPT/AGENCY:  
INTERFERENCE - IPA  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.69: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	10:57
BLANK TEST	0.000	10:58
INTERNAL STANDARD	VERIFIED	10:58
Xq = 0.085 (0.10%)		
EXTERNAL STANDARD	0.079	10:58
X[1] = 0.0792 (0.0002) (0.0019)		
BLANK TEST	0.000	10:59
SUBJECT SAMPLE	XXX	10:59
X[1] = 0.1062 (-0.0267) (0.0019)		

Interference Detected

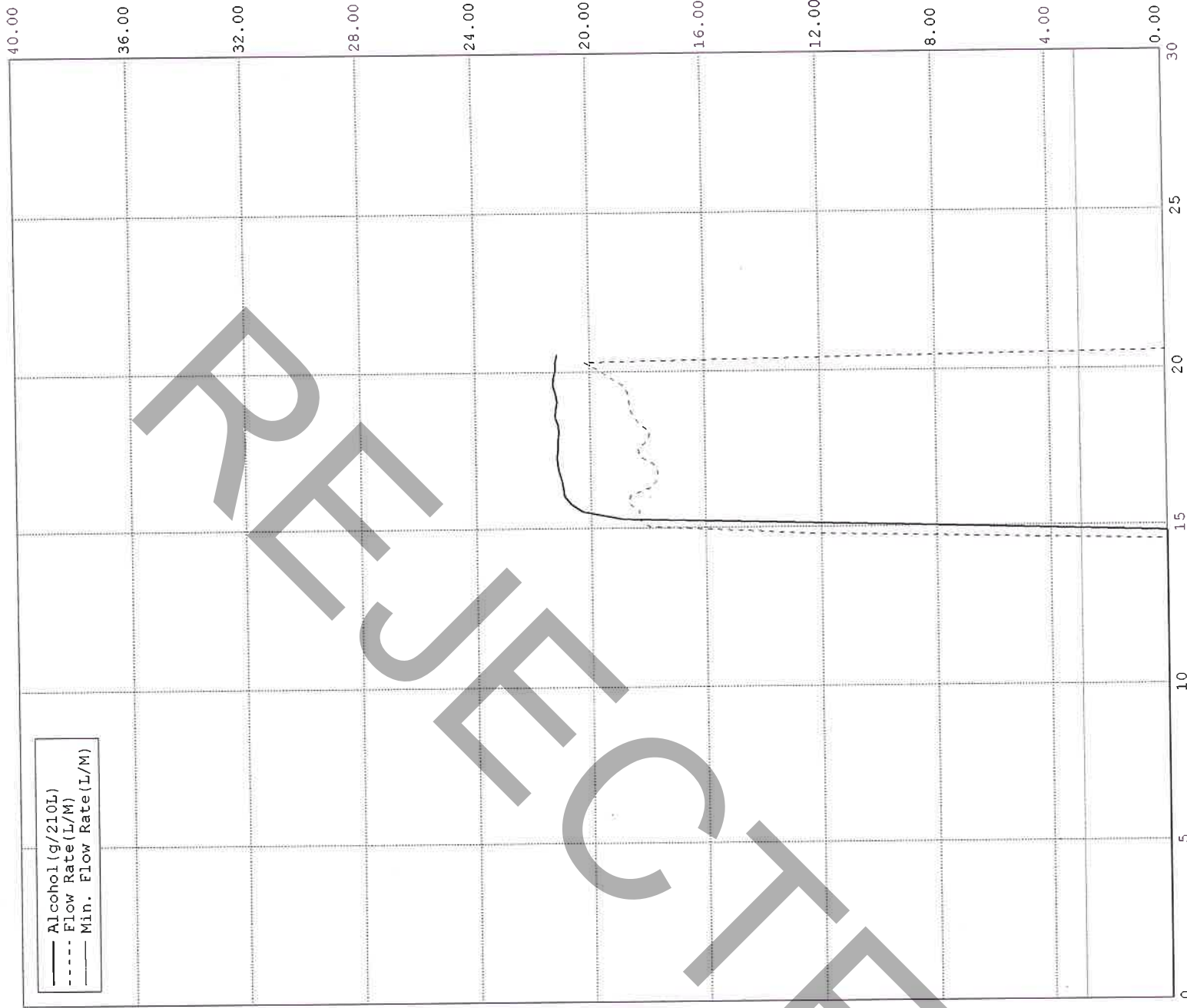
Filter 2 average = 0.0004

Filter 3 average = 0.0022

KS 6/28/24

JM 07/11/24

KS



SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER dmt: 100342

Date: 06/28/2024  
 Time: 11:01:25

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXX

OPERATOR NAME:  
 KAIJA SWISHER  
 OPERATOR'S #: 10746

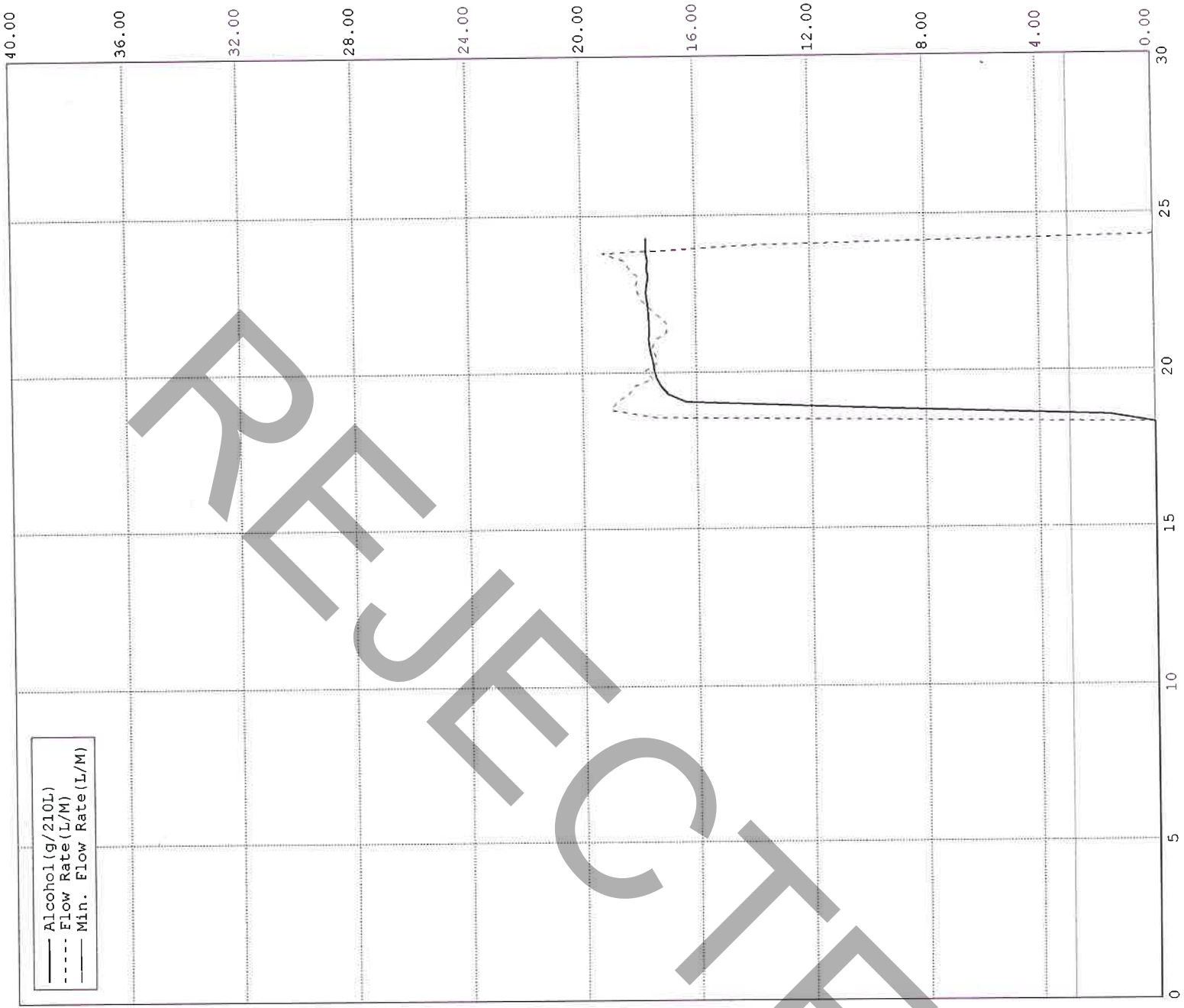
DEPT/AGENCY:  
 INTERFERENCE - NEGATIVE  
 CASE/REPORT: XXX  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.68: 0.079  
 LOT #: AG335202  
 EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	11:02
BLANK TEST	0.000	11:02
INTERNAL STANDARD	VERIFIED	11:02
Xq = 0.086 (0.20%)		
EXTERNAL STANDARD	0.079	11:02
X[1] = 0.0792 (-0.0001) (0.0024)		
BLANK TEST	0.000	11:03
SUBJECT SAMPLE (Vol=1.70L)	0.089	11:04
X[1] = 0.0890 (0.0000) (0.0012)		
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.079	11:05
X[1] = 0.0794 (0.0011) (0.0026)		
BLANK TEST	0.000	11:06

KS



# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100342

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 06/28/2024

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.68: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025  
TANK PRESSURE: 1098 psi

BLANK TEST	0.000	10:35
INTERNAL STANDARD	VERIFIED	10:35
EXTERNAL STANDARD	0.079	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.080	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.080	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.079	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.080	10:39
BLANK TEST	0.000	10:40

Average = 0.0796  
Std Dev = 0.0005

## Diagnostic Check

### VERSIONS

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

### TEMPERATURES

Sample Chamber = 48.8°C	PASSED
Breath Tube = 43.9°C	PASSED

### PUMP INFO

Flow Rate = 4.227 L/M	PASSED
-----------------------	--------

### DETECTOR INFO

PUMP ON	PASSED
PUMP OFF	PASSED

### FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD	PASSED
-------------------	--------

SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100342

Date: 06/28/2024

Time: 10:42:28

SUBJECT NAME:

TEST TEST

LICENSE #: XXX

OPERATOR NAME:

KAIJA SWISHER

OPERATOR'S #: 10746

DEPT/AGENCY:

NON-DRINKING SUBJECT TEST

CASE/REPORT: XXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.68: 0.079

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	10:43
BLANK TEST	0.000	10:43
INTERNAL STANDARD	VERIFIED	10:43
EXTERNAL STANDARD	0.080	10:44
BLANK TEST	0.000	10:45
SUBJECT SAMPLE (Vol=1.86L)	0.000	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.080	10:46
BLANK TEST	0.000	10:47



KS