### ALCOTEST 9510 PARAMETER REPORT

Equipment
Serial No.:
Firmware:
WinCE application:
Configuration: ARMH-0017 8326739 1.5 8326738 2.9 8326737 3.10

11/10/2022 Date: Time: 13:34:02

Parameter min. blow time min. breath volume for females of age 60+ min. breath volume for all other min. blow flow plateau detection limit plateau detection start conc.	5.0 1.2 1.5 4.5 4 70	s L L L/min % microgram/L
neg. flow detection (part. vacuum) neg. flow detection sensitivy	10.0 10	hPa
cal. gas abort volume result-to-zero limit ambient air check limit	0.4 0.0050 0.0049	L %BAC %BAC
interference det. d-criterion limit abs. interference det. d-criterion limit rel. interference det. t-criterion limit abs. interference det. t-criterion limit rel.	38 10.0 8 2.1	microgram/L % microgram/L %
IR CO2 offset IR H2O offset EC H2O offset	10 4 0	microgram/L microgram/L microgram/L
Value-based EC aging comp. on/off (1/0) Time-based EC aging comp. on/off (1/0) Time-based EC aging comp. per month Time-based EC aging comp. maximum	0 1 0.2 3.0	% % -
EC fatigue comp. max. sum EC fatigue comp. factor EC fatigue comp. minutes	15000 50 180	,
mouth alc. mark limit mouth alc. lower limit mouth alc. slope mouth alc. zero limit mouth alc. max. neg. sum mouth alc. max. 2nd derivative	500 30 6 50 6 35	

### ALCOTEST 9510 CERTIFICATION REPORT - WET ADJUST (PART I) Wall Township

Equipment

Inst. Model No.: Firmware:

ALCOTEST 9510 Serial No.:

ARMH-0017

8326737 3.10 8326739 1.5 Config.:

WinCE:

8326738 2.9

2

**Wet Adjust Record** 

Wet Adjust File No.: 111

Wet Adjust Date: Wet Adjust Time: 11/10/2022 14:15:02

Wet Adjust No.:

Concentration:

0.100 %

Adjusting Unit: X-Cal 2000 Adj. Unit Ser. No.:

ARND-0008

Adj. Unit Exp.:

01/13/2023

Solution Lot No.:

21210

Soln. Bottle No.:

288

Adjust Soln. Exp.: 06/16/2023

Preadjust Simulator Temp.: Postadjust Simulator Temp.: 34.00 degree C 34.01 degree C

Result

Procedure completed successfully.

Coordinator

Last Name: Alcott -

First Name: Kevin

MI: W

Badge No.: 6704

On this date, I certified the above instrument in accordance with the Alcotest 9510 operator training and procedures established by the NJSP Office of Forensic Sciences.

SH 1/ am 6704

Signed:

Date: 11/10/2022

ID: 1

### ALCOTEST 9510 CERTIFICATION REPORT - DRY ADJUST (PART II) Wall Township

**Equipment** Inst. Model No.: ALCOTEST 9510 Serial No.:

ARMH-0017

8326737 3.10 Firmware: 8326739 1.5 Config.:

8326738 2.9

2

**Dry Adjust Record** 

Dry Adjust File No.: 112

Dry Adjust Date: 11/10/2022 Dry Adjust Time: 14:26:13

Dry Adjust No.:

WinCE:

Concentration:

0.100 %

Dry Gas Lot No.: 1460885 Mensor CPG2300 Barom. Serial No.:

Adjust Gas Exp.:

03/12/2024

4100126Y Barom. Cert. Exp.:12/01/2022

Barom. Model No.: Pre-adjust Amb. Pressure:

1022 hPa

Post-adjust Amb. Pressure:

1023 hPa

### Result

Procedure completed successfully.

Coordinator

Last Name: Alcott -

First Name: Kevin

MI: W

Badge No.: 6704

On this date, I certified the above instrument in accordance with the Alcotest 9510 operator training and procedures established by the NJSP Office of Forensic Sciences.

Signed:

Date: 11/10/2022

ID: 1

### ALCOTEST 9510 CERTIFICATION REPORT - LINEARITY (PART III) Wall Township

**Equipment** 

Inst. Model No.: ALCOTEST 9510 Serial No.: ARMH-0017

Firmware: 8326739 1.5 Config.: 8326737 3.10 WinCE: 8326738 2.9

**Linearity Record** 

Linearity File No.: 113 Lin. Date: 11/10/2022 Lin. No.: 2

 0.040% Dry Gas Lot No.:
 1486624
 Adjust. Gas Exp.:
 04/26/2024

 0.080% Dry Gas Lot No.:
 1346773
 Adjust. Gas Exp.:
 07/08/2023

 0.160% Dry Gas Lot No.:
 1523726
 Adjust. Gas Exp.:
 07/16/2024

 0.300% Dry Gas Lot No.:
 1495468
 Adjust. Gas Exp.:
 05/14/2024

**Data Summary** 

Data Summary				
Function	Result	Time	Barometric	Comment(s)
	%BAC_	hh:mm:ss	Pres. [hPa]	or Status Code
Ambient Air Blank	0.000	14:30:31		*TEST PASSED*
Control .04 Test 1 EC	0.040	14:31:09	1023	*TEST PASSED*
Control .04 Test 1 IR	0.039	14:31:09	1023	*TEST PASSED*
Ambient Air Blank	0.000	14:32:08		*TEST PASSED*
Control .04 Test 2 EC	0.040	14:32:23	1023	*TEST PASSED*
Control .04 Test 2 IR	0.040	14:32:23	1023	*TEST PASSED*
Ambient Air Blank	0.000	14:33:40		*TEST PASSED*
Control .08 Test 3 EC	0.079	14:34:17	1023	*TEST PASSED*
Control .08 Test 3 IR	0.080	14:34:17	1023	*TEST PASSED*
Ambient Air Blank	0.000	14:35:19		*TEST PASSED*
Control .08 Test 4 EC	0.080	14:35:35	1023	*TEST PASSED*
Control .08 Test 4 IR	0.080	14:35:35	1023	*TEST PASSED*
Ambient Air Blank	0.000	14:37:04		*TEST PASSED*
Control .16 Test 5 EC	0.158	14:37:41	1023	*TEST PASSED*
Control .16 Test 5 IR	0.159	14:37:41	1023	*TEST PASSED*
Ambient Air Blank	0.000	14:38:49		*TEST PASSED*
Control .16 Test 6 EC	0.161	14:39:04	1023	*TEST PASSED*
Control .16 Test 6 IR	0.161	14:39:04	1023	*TEST PASSED*
Ambient Air Blank	0.000	14:40:51		*TEST PASSED*
Control .30 Test 7 EC	0.298	14:41:27	1023	*TEST PASSED*
Control .30 Test 7 IR	0.296	14:41:27	1023	*TEST PASSED*
Ambient Air Blank	0.000	14:42:47		*TEST PASSED*
Control .30 Test 8 EC	0.301	14:43:02	1023	*TEST PASSED*
Control .30 Test 8 IR	0.298	14:43:02	1023	*TEST PASSED*
Ambient Air Blank	0.000	14:43:27		*TEST PASSED*

### Result

All tests within acceptable tolerance.

Coordinator

Last Name: Alcott - First Name: Kevin MI: W Badge No.: 6704

On this date, I certified the above instrument in accordance with the Alcotest 9510 operator training and procedures established by the NJSP Office of Forensic Sciences.

Set 9K OK 6704

Signed: Date: 11/10/2022 ID: 1

### ALCOTEST 9510 CYLINDER INSTALLATION REPORT - INLET 1 Wall Township SERIAL NUMBER: ARMH-0017

Firmware:

**Equipment** Inst. Model No.:

ALCOTEST 9510 Serial No.: Config.:

ARMH-0017

8326737 3.10

WinCE:

8326738 2.9

Cyl1 Install File No.: 114

8326739 1.5

Cyl1 Install Date:

11/10/2022

Cyl1 Install No.:

**Control Tests** (0.100%)

Installation Inlet:

#1 (Upper)

Post test active Cyl.: #2 (Lower)

Dry Gas Lot No.:

302-402422686

Dry Gas Lot Exp...

04/21/2025

**Data Summary** 

Data Summary				
Function	Result %BAC	Time hh:mm:ss	Barometric Pres. [hPa]	Comment(s) or Status Code
Ambient Air Blank Control Test 1	0.000	14:47:10	1023	*TEST PASSED* *TEST PASSED*
EC Result	0.101	14:47:56		*TEST PASSED*
IR Result	0.100	14:47:56		*TEST PASSED*
Ambient Air Blank	0.000	14:49:02		*TEST PASSED*
Control Test 2			1023	*TEST PASSED*
EC Result	0.101	14:49:27		*TEST PASSED*
IR Result	0.101	14:49:27		*TEST PASSED*
Ambient Air Blank	0.000	14:50:34		*TEST PASSED*
Control Test 3			1023	*TEST PASSED*
EC Result	0.101	14:50:59		*TEST PASSED*
IR Result	0.101	14:50:59		*TEST PASSED*
Ambient Air Blank	0.000	14:51:23		*TEST PASSED*

### Result

### All tests within acceptable tolerance.

Coordinator

Last Name: Alcott -

First Name: Kevin

MI: W

Badge No.: 6704

On this date, I certified the above instrument in accordance with the Alcotest 9510 operator training and procedures established by the NJSP Office of Forensic Sciences.

5+ 1Kar 6704

Signed:

Date: 11/10/2022

ID: 1

# ALCOTEST 9510 CYLINDER INSTALLATION REPORT - INLET 2 Wall Township SERIAL NUMBER: ARMH-0017

Equipment Inst. Model No.:

ALCOTEST 9510 Serial No.:

ARMH-0017

8326737 3.10 WinCE: 8326738 2.9

Firmware: Cyl2 Install File No.: 33

8326739 1.5

Config.: Cyl2 Install Date:

06/14/2022

Cyl2 Install No.:

Control Tests (0.100%)

Installation Inlet: Dry Gas Lot No.:

#2 (Lower) 1498393

Post test active Cyl.: Dry Gas Lot Exp.:

#2 (Lower) 05/25/2024

Pata Summary Function	Result %BAC	Time hh:mm:ss	Barometric Pres. [hPa]	Comment(s) or Status Code
Ambient Air Blank	0.000	11:05:31	1010	*TEST PASSED* *TEST PASSED*
Control Test 1  EC Result	0.099	11:06:19	1010	*TEST PASSED*
IR Result	0.100	11:06:19		*TEST PASSED* *TEST PASSED*
Ambient Air Blank Control Test 2	0.000	11:07:17	1010	*TEST PASSED*
EC Result	0.100	11:07:44		*TEST PASSED*  *TEST PASSED*
IR Result	0.101 0.000	11:07:44 11:08:43	:	*TEST PASSED*
Ambient Air Blank Control Test 3		• •	1010	*TEST PASSED* *TEST PASSED*
EC Result	0.100 0.101	11:09:10 11:09:10	\$	*TEST PASSED*
IR Result Ambient Air Blank	0.000	11:09:27		*TEST PASSED*

### Result

All tests within acceptable tolerance.

Coordinator

Last Name: ALCOTT -

First Name: KEVIN

MI: W

Badge No.: 6704

On this date, I certified the above instrument in accordance with the Alcotest 9510 operator training and procedures established by the NJSP Office of Forensic Sciences.

Signed:

Date: 06/14/2022

ID: 1

### CERTIFICATE OF ANALYSIS

### **EBS - ETHANOL BREATH STANDARD**

Sales order: 1109388535

Date: April 26, 2022

DRAEGER MEDICAL SYSTEMS INC.;

IR Breath Alcohol Analyzer

ANALYTICAL ACCURACY: +/-0.002 BrAC or +/-2% whichever is greater.

CALGAZ LOT#: 302-402422686

ETHANOL IN NITROGEN

METHOD OF ANALYSIS:

Product Expiration: April 21, 2025

COMPONENT	PPM	(BrAC)
ETHANOL	260.5PPM	(0.100)
NITROGEN	BAL	·
AVERAGE ANALYTICAL VALUE	PPM	(BrAC)
ETHANOL	263.3	(0.101)
EFERENCE STANDARD	CYLINDER	CONCENTRATION PPM
.M.I. TRACEABLE STANDARDS*	ND38434	260.4

CERTIFICATION TRACEABLE TO NATIONAL METROLOGY INSTITUTE TRACEABLE STANDARDS

#### **TRACEABILITY**

Preparation:

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.

Calibration test 283190, 283189, 283188, or 283192 dated 6th January 2022 applies

Analytical Instruments Calibrated Using NMI Traceable Standards.

Certification Numbers: ND38434-20211028, A679, A650, ND38462-20211027, ND18363-20211104,

ND50144-20201218

Manufactured Date: April 21, 2022

No effecting environmental conditions during analysis.

\*NMI is recognized by NIST through the Mutual Recognition Agreement (CIPM MRA). CALGAZ calibration devices were found to meet all applicable requirements of the National Highway Traffic Safety Administration Model Specifications for calibrating units for breath alcohol testers.

APPROVED BY:

"We certify that all the cylinders for the Lot numbers identified herin are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."

CALGAZ, a division of Airgas USA LLC

821 Chesapeake Drive, Cambridge, MD 21613-0149

Phone: (410) 228-6400

Fax: (410) 228-4251

## CERTIFICATE OF ANALYSIS EBS - ETHANOL BREATH STANDARD

DRAEGER INC HOUSTON HOUSTON, TX 77085 REF#: 21775557

DOC#: US44302405855 CUST. ITEM #: 4401036 DATE: Jun. 18, 2021

METHOD OF ANALYSIS: IR Breath Alcohol Analyzer

ANALYTICAL ACCURACY: +/-0.002 Brac or +/-2% whichever is greater.

CALGAZ LOT#: 1498393

ETHANOL IN NITROGEN

PRODUCT EXPIRATION: May. 25, 2024

:	COMPONENT	 <b>PPM</b>	( BrAC )
•	ETHANOL NITROGEN	260.5 BAL	(0,100)

REFERENCE STANDARD

CYLINDER:

CONCENTRATION PPM

N.M.I. TRACEABLE STANDARDS\*

ND50144

260.6

\* Certification traceability is recognized by NIST through the CIPM MRA.

TRACEABILITY

Preparation:

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.

Calibration test 219908, 219911, 219909, or 219926 dated, 6th January 2021 applies.

Analytical:

Analytical Instruments Calibrated Using NMT Traceable Standards. Certification Numbers: ND50144-20201218, A679, ND18363-20191203, A650

No affecting environmental conditions during analysis.

NMI is recognized by NTST through the Mutual Recognition Agreement (CIPM MRA).

CALCAZ calibration devices were found to meet all applicable requirements of the National Highway

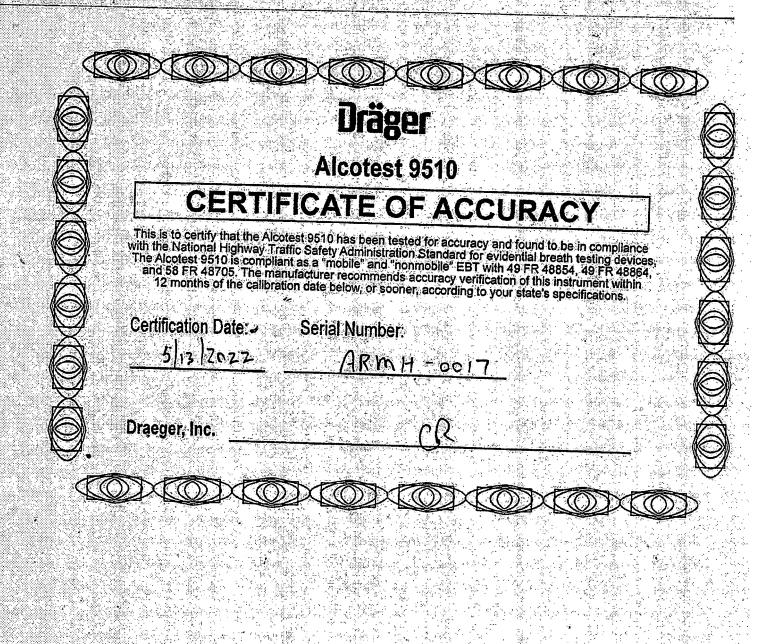
Traffic Safety Administration Model Specifications for calibrating units for breath alcohol testars.

MANUFACTURED DATE: May. 25, 2021

CALGAZ CYLINDER SIZE: 6D

APPROVED BY

"Mo certify that all the cylinders for the lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."





### State of New Jersey

PHILIP D. MURPHY. Governor

SHEILA Y. OLIVER Lt. Governor.

OFFICE OF THE ATTORNEY GENERAL DEPARTMENT OF LAW AND PUBLIC SAFETY DIVISION OF STATE POLICE POST OFFICE BOX 7068 WEST TRENTON, NJ 08628-0068 (609) 882-2000

GURBIR S. GREWAL Attorney General

PATRICK J. CALLAHAN Colonel

### CERTIFICATION OF ANALYSIS 0.100 PERCENT BREATH ALCOHOL SIMULATOR SOLUTION

ACCEPTANCE SPECIFICATIONS FOR BREATH ALCOHOL SIMULATOR SOLUTION: Ethyl alcohol concentration within, but not exceeding, the range of 0.1174 to 0.1246 grams per 100 milliliters of solution.

MANUFACTURER: Draeger, Inc.

**ANALYSIS DATE: 07/07/2021** 

BREATH ALCOHOL SIMULATOR SOLUTION LOT NUMBER: 21210

Representative samples of the above-referenced Lot Number were tested by Gas Chromatography and found to have a mean ethyl alcohol concentration range of 0.1199 to 0.1215 grams per 100 milliliters of solution.

This lot of breath alcohol simulator solution may be utilized as a known traceable standard for the purpose of conducting periodic tests, pursuant to N.J.A.C. 13:51-4.3, of approved breath test instruments (N.J.A.C. 13:51-3:5). utilized by law enforcement agencies in this State. The manufacturer's expiration date for this lot of breath alcohol simulator solution is June 16, 2023.

As Assistant Chief Forensic Scientist for the Division of State Police, Thereby certify and attest that the tests and results documented in this Certificate of Analysis were performed at the Office of Forensic Sciences of the Division of State Police on properly functioning and calibrated instruments and equipment. All procedures utilized are accurate, objective, and performed on a routine basis by personnel within the Office of Forensic Sciences, in accordance with their professional duties and responsibilities.

> whool Henrid Michael Kennedy

Assistant Chief Forensic Scientist NJSP Office of Forensic Sciences

worn to and subscribed before me this 20

2021.

KAREN E. STAHL NOTARY PUBLIC OF NEW JERSEY Commission # 60110522 My Commission Expires 8/13/2024

"An Internationally Accredited Agency"

New Jersey Is An Equal Oppartunity Employer Primed on Recycled Paper and Recycloble





**Customer: DRAEGER INC** 

7256 S SAM HOUSTON PKWY W

**STE 100** 

HOUSTON, TX 77085

PO Number: S1O4302598632



#### Certificate/SO Number: 5-D6Z1H-20-1 Revision 0

Manufacturer: Drager Safety AG & Co. KGaA

Model Number: X-Cal 2000

Description: Breath Alcohol Simulator

Serial Number: ARND-0008

ID: NONE

As-Found: In Tolerance

As-Left: In Tolerance

Issue Date: Jan 13, 2022

Calibration Date: Jan 13, 2022

Due Date: Jan 13, 2023

Calibrated To: Customer Specification

Calibration Procedure: 1-AC103519-1

Transcat Calibration Laboratories have been audited and found in compliance with ISO /IEC 17025:2017. Accredited calibrations performed within the Lab Scope of Accreditation are indicated by the presence of the Accrediting Body Logo and Certificate Number. Any measurements on an accredited calibration not covered by the Lab Scope of Accreditation are listed in the notes section of the certificate. SCC, NRC, CLAS or ANAB do not guarantee the accuracy of an individual calibration by accredited laboratories.

Transcat calibrations, as applicable, are performed in compliance with the requirements of the Transcat Quality Manual QAC -P01-000, the customer Purchase Order and/or Quality Agreement requirements, ISO 9001:2015, ANSI/NCSL Z540.1-1994 (R2002), and ISO 10012:2003, as applicable. When specified contractually, the requirements of ISO TS16949:2009, 10CFR21, 10CFR50 App. B, ASME NQA-1:2012, and ANSI/NCSL Z540.3-2006 (R2013) are also covered.

Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are listed on this certificate.

Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST), or the National Research Council of Canada (NRC), or other national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Arrangement, or accepted fundamental and/or natural physical constants, or by the use of specified methods, consensus standards or ratio type measurements.

Documentation supporting traceability information is available for review upon written request at a Transcat facility.

Uncertainties are reported with a coverage factor k=2, providing a level of confidence of approximately 95%. All calibrations have been performed using processes having a TUR of 4:1 or better (3:1 for mass calibrations), unless otherwise noted. The Test Uncertainty Ratio (TUR) is calculated in accordance with NCSL International RP-18. For mass calibrations: Conventional mass referenced to 8.0 g/cm³.

The results in this report relate only to the item calibrated or tested. Recorded calibration data is valid at the time of calibration within the stated uncertainties at the environmental conditions noted. The determination of compliance to the specification is specific to the model/serial no./ID no, referenced above based on the tolerances shown; these tolerances are either the original equipment manufacturers (OEM's) warranted specifications or the client's requested specifications. Any number of factors can cause a unit to drift out of tolerance at any time following its calibration. Limitations on the uses of this instrument are detailed in the OEM's operating instructions. This certificate may not be reproduced except in full, without the written approval of Transcat. Additional information, if applicable may be included on separate report(s).

Date Received: January 12, 2022

Service Level: R9

Certificate - Page 1 of 5
Reprinted on January 19, 2022

Customer Number:

OPS-F20-014R10 09/29/21 FP001R9 4/9/2021

1-659111-000

### CALIBRATED

### **CERTIFICATE OF CALIBRATION**

**Customer: DRAEGER INC** 

7256 S SAM HOUSTON PKWY W

STE 100

HOUSTON, TX 77085

PO Number: S1O4302598632



Certificate/SO Number: 5-D6Z1H-20-1 Revision 0

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	ου	al Process ncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Function Checks										
Bubble Check			Р	Р	Р					
Seal Check	~~		P	P	Ρ					
Temperature Source: Accurac	/ Test									
Accuracy Test	34.00°C	±( 0.02 °C)	33.98	34.02	34.01 °C	1	.1e-002	1.6e-002	°C	1.8:1
Temperature Source: Stability	Test									
Stability Test	0.00°C	±( 0,02 °C)	-0.02	0.02	0.00°C	1	.1e-002	1,6e-002	· °C ·	1,8,1
The an executive for the desired and the second sec	huvaunhunnanananananananananananananananana	nggardarma ng Andriana ng mang arang a							Field not applica	able.

Asset	Manufacturer	Model Number	Description	Cal Date	Due Date	Traceability Number	Use
05H1277	AccuMac Corporation	AM1760-12-S	Secondary SPRT	27-May-21	31-May-22	15-&05H1277-3-1	AF/AL
HP927312	Hart Scientific/Fluke	1575	Super Thermometer	18-May-21	30-Nov-22	5-&HP927312-5-1	AF/AL

The use of the standard is defined as: AF - used for as-found readings, AL - used for as-left readings.

#### **Environmental Data**

Temperature	Relative Humidity	Temp / RH Asset	Lab Area	Lab Description
70.31°F /21.28°C	38.10%	DewK6	G	Temperature

#### **Decision Rule**

When compliance statements are present, they are reported without factoring in the effects of uncertainty and comply with the guidelines as follows: The acceptance zone is defined as: less than or equal

Date Received: January 12, 2022

Service Level: R9

Certificate - Page 2 of 5 Reprinted on January 19, 2022

Customer Number: 1-659111-000



**Customer: DRAEGER INC** 

7256 S SAM HOUSTON PKWY W

STE 100

HOUSTON, TX 77085

PO Number: S1O4302598632



ANAB AC-2489.02

#### Certificate/SO Number: 5-D6Z1H-20-1 Revision 0

to the high limit, and/or greater than or equal to the low limit. The rejection zones are defined as greater than the high limit and/or less than the low limit. Single measurement results in the acceptance zone are identified as in-tolerance. Single measurement results in the rejection zone are identified as out-of-tolerance (OOT). When all measurement results are in the acceptance zone for repeated measurements, for the same characteristic, the test is identified as in-tolerance. For repeated characteristic measurements, a single measurement result in the rejection zone, will cause the test to be identified as out-of-tolerance (OOT). Data rejection for cause, (outliers) is permitted after the "Determining and Verifying Out Of Tolerance (OOT) and/or Op Fail Readings" procedure outlined in this document has been completed and the anomalous reading cannot be repeated, and the anomalous reading does not represent the system under test. Statements of conformity are binary.

Date Received: January 12, 2022

Service Level: R9

Certificate - Page 3 of 5 Reprinted on January 19, 2022

**Customer Number:** 

1-659111-000



**Customer: DRAEGER INC** 

7256 S SAM HOUSTON PKWY W

STE 100

HOUSTON, TX 77085

PO Number: S1O4302598632



Certificate/SO Number: 5-D6Z1H-20-1 Revision 0

	Legend
Topic	Description
Accuracy	UUT specification that establishes expected tolerances and a time limit (calibration interval) over which the instrument is expected to hold these tolerances
As Found	Initial measurement results
As Left	Measurement results after adjustment and/or repair
Blank Data Field	Test is not applicable for the UUT
Cal Process Uncertainty (CPU)	The uncertainty of calibration process for the reported measurement result
Calibration Date	Indicates the date that the calibration was completed
Cover Factor (k)	A measure of uncertainty that defines an interval about the measurement result
Due Date	Indicates the end of the calibration cycle as requested by the customer
Issue Date	Indicates the date that the calibration has passed the Data Review Process and was signed by an authorized signatory or the date that a revision to the original certificate has been issued
Low / High Limits	Establishes UUT acceptable performance limits for the test measurement
Measurement Uncertainty	The dispersion of the values attributed to a measured quantity
OOA	Out of Acceptance (#)
ООТ	Out of Tolerance (*)
Setpoints	Measurement target values
Traceability	Unbroken chain of comparisons relating an instrument's measurements to a known standard(s)
Traceability Number	Unique identifier(s) used to document traceability of calibration standards
TUR	Test Uncertainty Ratio, ratio of the tolerance or specification of the test measurement in relation to the uncertainty in measurement results
UUT	Unit Under test

Date Received: January 12, 2022

Service Level: R9

Certificate - Page 4 of 5
Reprinted on January 19, 2022

Customer Number: 1-659111-000



**Customer: DRAEGER INC** 

7256 S SAM HOUSTON PKWY W

STE 100

HOUSTON, TX 77085

PO Number: S1O4302598632



ANAB AC-2489.02

Certificate/SO Number: 5-D6Z1H-20-1 Revision 0

Calibrated At: 16115 Park Row Houston, TX 77084

Facility Responsible: 16115 Park Row Houston, TX 77084 800-828-1470

Calibrated By:

Camden Alford

Calibration Technician

Electronically Signed By: Camden Alford

14:04:04 -05:00

Jan 13, 2022

Reviewed By: **Electronically Signed By:** 

Josh Soileau for

Scott D. Caine Lab Manager

Jan 13, 2022 14:05:53 -05:00

Unit Barcode: 0

Date Received: January 12, 2022

Service Level: R9

Certificate - Page 5 of 5 Reprinted on January 19, 2022

**Customer Number:** 

1-659111-000

## CALIBRATED

## **CERTIFICATE OF CALIBRATION**

Customer: DRAEGER INC

7256 S SAM HOUSTON PKWY W

**STE 100** 

HOUSTON, TX 77085

PO Number: \$104302546536



Certificate/SO Number: 5-GG5JD-20-1 Revision 0

Manufacturer: Mensor Corp Model Number: CPG2300

**Description:** Portable Barometer

Serial Number: 4100126Y

ID: NONE

As-Found: In Tolerance As-Left: In Tolerance

Issue Date: Dec 01, 2021

Calibration Date: Dec 01, 2021

Due Date: Dec 01, 2022

Calibrated To: Manufacturer Specification

Calibration Procedure: 1-AC107288-0

Transcat Calibration Laboratories have been audited and found in compliance with ISO/IEC 17025:2017. Accredited calibrations performed within the Lab Scope of Accreditation are indicated by the presence of the Accrediting Body of an individual calibration by accredited laboratories.

Transcat calibrations, as applicable, are performed in compliance with the requirements of the Transcat Quality Manual QAC-P01-000, the customer Purchase Order and/or Quality Agreement requirements, ISO 9001:2015, ANSVNCSL Z540.1-1994 (R2002), and ISO 10012:2003, as applicable. When specified contractually, the requirements of ISO TS16949:2009, 10CFR21, 10CFR50 App. B, ASME NQA-1:2012, and ANSVNCSL Z540.3-2006 (R2013) are also

Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are listed on this certificate.

Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST), or the National-Research Council of Canada (NRC), or other national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Arrangement, or accepted fundamental and/or natural physical constants, or by the use of specified methods, consensus standards or ratio type measurements.

Documentation supporting traceability information is available for review upon written request at a Transcat facility. The measured quantity and the measurement uncertainty are required for further dissemination of traceability.

Uncertainties are reported with a coverage factor k=2, providing a level of confidence of approximately 95%. All calibrations have been performed using processes having a TUR of 4:1 or better (3:1 for mass calibrations), unless otherwise noted. The Test Uncertainty Ratio (TUR) is calculated in accordance with NCSL International RP-18. For mass calibrations: Conventional mass referenced to 8.0 g/cm³.

The results in this report relate only to the item calibrated or tested. Recorded calibration data is valid at the time of calibration within the stated uncertainties at the environmental conditions noted. The determination of compliance to specification is specific to the model/serial no./ID no. referenced above based on the tolerances shown; these tolerances are either the original equipment manufacturers (OEM's) warranted specifications or the client's requested be reproduced except in full, without the written approval of Transcat. Additional information, if applicable may be included on separate report(s).

Date Received: November 15, 2021

Service Level: R9

Certificate - Page 1 of 5

Customer Number: 1-659111-000

## CALIBRATED CERTIFICATE OF CALIBRATION

Customer: DRAEGER INC

7256 S SAM HOUSTON PKWY W

STE 100

HOUSTON, TX 77085

PO Number: \$104302546536



Certificate/SO Number: 5-GG5JD-20-1 Revision 0

			As Found/	As Left Data						
Description Pressure Measure: 552	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	0 0 T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
1000010 111025416. 002	_				,		-			· · · · · · · · · · · · · · · · · · ·
	550.1mbara	±(0.015% FS)	549.9	550.3	550.1 mbara		1 10 000	4.0 004		
	610.0mbara	±(0.015% FS)	609.8	610.2	610.0 mbara		1.1e-002	1.2e-001	mbara	18.2
	680.4mbara	±(0.015% FS)	680:2	680.6			1.2e-002	1.2e-001	mbara	16.4
	734.3mbara	±(0.015% FS)			680.4 mbara		1.4e-002	1.2e-001	mbara	14.7
	804.7mbara	±(0.015% FS)	734.1	734.5	734.3 mbara		1.5e-002	1.2e-001	mbara	13.6
	864.9mbara		804.5	804.9	804.7 mbara		1.6e-002	1.2e-001	mbara	12.4
		±(0.015% FS)	864.7	865.1	864.9 mbara		1.8e-002	1.2e-001	mbara	
	924.9mbara	±(0.015% FS)	924.7	925.1	924.9 mbara		1.9e-002	1.2e-001		11.0
	985.2mbara	±(0.015% FS)	985.0	985.4	985.2 mbara				mbara	10.3
	1043.9mbara	±(0.015% FS)	1043.7	1044.1			2.1e-002	1.2e-001	mbara	9.7 :
	1114.2mbara	±(0.015% FS)	1114.0		1043.9 mbara		2.2e-002	1.3e-001	mbara	9.1 :
	1174.6mbara	±(0.015% FS)		1114.4	1114.2 mbara		2.3e-002	1.2e-001	mbara	8.5 :
	924.9mbara	· ·	1174.4	1174.8	1174.6 mbara		2.5e-002	1.2e-001	mbara	8.1 :
	·. ·	±(0.015% FS)	924.7	925.1	924.9 mbara		1.9e-002	1.2e-001	mbara	10.3.
	864.9mbara	±(0.015% FS)	864.7	865.1	864.9 mbara		1.8e-002	1.2e-001		
	804:7mbara	±(0.015% FS)	804.5	804.9	804.7 mbara				mbara	11.0
	* <del>'i i i i i i i i i i i i i i i i i i i</del>				. 99117 7110010		1.7e-002	1.2e-001	mbara	11.8

Field not applicable.

Date Received: November 15, 2021

Service Level: R9

Certificate - Page 2 of 5

Customer Number: 1-659111-000



Customer: DRAEGER INC

7256 S SAM HOUSTON PKWY W

STE 100

HOUSTON, TX 77085

PO Number: S1O4302546536



Certificate/SO Number: 5-GG5JD-20-1 Revision 0

#### Traceable Standards

Asset	Manufacturer						
	wanuracturer	Model Number	Description	Cal Date	Due Date	<b>T</b>	
DW11BA	Fluke/DH Instruments	PG7601	Pigton Court		Due Date	Traceability Number	Use
DW11CA	Fluke/DH Instruments		Piston Gauge	5-Apr-21	5-Apr-22	5-&DW11BA-10-1	AF/AL
DW11LOW		MS-AMH-38	AMH Mass Set	3-Sep-21	3-Dec-21	5-&DW11CA-10-1	
	Fluke/DH Instruments	PC-7100/7600-10-TC	Gas Piston-Cylinder Module	2-Mar-17	, -		AF/AL
DW11MASS	Fluke/DH Instruments	MS-AMH-38	AMH Mass Set		31-Mar-22	5-&DW11LOW-1-1	AF/AL
ba £41	andard is defined as: AE		Vivi I Mass Gef	4-Jun-20	31-Dec-21	5-&DW11MASS-4-1	AF/AL

The use of the standard is defined as: AF - used for as-found readings, AL - used for as-left readings.

#### **Environmental Data**

	- Control of the Cont	-nviioniiental Data		
Temperature	Relative Humidity	Temp / RH Asset		
71.57°F /21.98°C	47.20%		Lab Area	Lab Description
	47.20/6	DewK5	В	Secondary Pressure
				• • • • • •

### **Decision Rule**

When compliance statements are present, they are reported without factoring in the effects of uncertainty and comply with the guidelines as follows: The acceptance zone is defined as: less than or equal to the high limit, and/or greater than or equal to the low limit. The rejection zones are defined as greater than the high limit and/or less than the low limit. Single measurement results in the acceptance zone are identified as out-of-tolerance (OOT). When all measurement results are in the acceptance zone for repeated identified as out-of-tolerance (OOT). Data rejection zone, will cause the test to be document has been completed and the anomalous reading cannot be repeated, and the anomalous reading does not represent the system under test. Statements of conformity are binary.

Date Received: November 15, 2021

Service Level: R9

Certificate - Page 3 of 5

Customer Number: 1-659111-000

## CALIBRATED

## CERTIFICATE OF CALIBRATION

Customer: DRAEGER INC

7256 S SAM HOUSTON PKWY W

**STE 100** 

HOUSTON, TX 77085

PO Number: S1O4302546536



### Certificate/SO Number: 5-GG5JD-20-1 Revision 0

Topic	Legend Description
Accuracy	UUT specification that establishes expected tolerances and a time limit (calibration interval) over which the instrument is expected to hold these tolerances
As Found	Initial measurement results
As Left	Measurement results after adjustment and/or repair
Blank Data Field	Test is not applicable for the UUT
Cal Process Uncertainty (CPU)	The uncertainty of calibration process for the reported measurement result
Calibration Date	Indicates the date that the calibration was completed
Cover Factor (k)	A measure of uncertainty that defines an interval about the measurement result
Due Date	Indicates the end of the calibration cycle as requested by the customer
ssue Date	Indicates the date that the calibration has passed the Data Review Process and was signed by an authorized signatory or the date that a revision to the original certificate
Low / High Limits	Establishes UUT acceptable performance limits for the test measurement
Measurement Uncertainty	The dispersion of the values attributed to a measured quantity
AOC	Out of Acceptance (#)
ООТ	Out of Tolerance (*)
Setpoints	Measurement target values
Traceability	Unbroken chain of comparisons relating an instrument's measurements to a known standard(s)
Fraceability Number	Unique identifier(s) used to document traceability of calibration standards
rur	Test Uncertainty Ratio, ratio of the tolerance or specification of the test measurement in relation to the uncertainty in measurement results
UUT	Unit Under test

Date Received: November 15, 2021

Service Level: R9

Certificate - Page 4 of 5

Customer Number: 1-659111-000

**Customer: DRAEGER INC** 

7256 S SAM HOUSTON PKWY W

STE 100

HOUSTON, TX 77085

PO Number: S104302546536



Certificate/SO Number: 5-GG5JD-20-1 Revision 0

Calibrated At: 16115 Park Row. Houston, TX 77084

16115 Park Row Houston, TX 77084 800-828-1470

Unit Barcode:

Date Received: November 15, 2021

Service Level: R9

Facility Responsible:

Calibrated By:

**Electronically Signed By:** Fritz Cardona

Calibration Technician

Reviewed By:

Electronically Signed By: Scott D. Caine

Fritz Cardona

Dec 01, 2021 09:38:54 -05:00

Scott D. Caine Lab Manager

Dec 01, 2021 09:49:05 -05:00

Certificate - Page 5 of 5

Customer Number: 1-659111-000



### CERTIFICATE OF ANALYSIS EBS - ETHANOL BREATH STANDARD

DRAEGER , INC 1221 S. BELTLINE RD, STE 700 COPPELL TX 75019

INVOICE#: 20908188 PO#: US44302331960 CUST, ITEM #: 4401036 DATE: Mar. 19, 2021

METHOD OF ANALYSIS: IR Breath Alcohol Analyzer

ANALYTICAL ACCURACY: +/-0.002 BrAC or +/-2% whichever is greater.

CALGAZ LOT#: 1460885

ETHANOL IN NITROGEN

PRODUCT EXPIRATION: Mar. 12, 2024

	COMPONENT	•	PPM	( BrAC )
	ETHANOL NITROGEN	260.5 BAL	(0.100)	
	AVERAGE ANALYTICAL VALUE	PPM	(BrAC)	
	ETHANOL		262.8	(0.101)
REFERENCE STANDARD		CYLINDER	CONC	ENTRATION PPM
N.M.I. TR	ACEABLE STANDARDS*	ND50144		260.6

<sup>\*</sup> CERTIFICATION TRACEABLE TO National Metrology Institute Traceable Standards.

#### TRACEABILITY

Preparation:

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited company using NIST traceable weights and meets or exceeds the requirements of

Calibration test 121088, 121097, 121091, or 121100 dated, 18th January 2019 applies.

Analytical:

Analytical Instruments Calibrated Using NMI Traceable Standards. Certification Numbers: ND50144-20201218, A679, ND18363-20191203, A650

No affecting environmental conditions during analysis.

\*NMI is recognized by NIST through the Mutual Recognition Agreement (CIPM MRA). CALGAZ calibration devices were found to meet all applicable requirements of the National Highway Traffic Safety Administration Model Specifications for calibrating units for breath alcohol testers.

MANUFACTURED DATE: Mar. 12, 2021

CALGAZ CYNINDER SIZE: 6D

APPROVED BY :

"We certify that all the cylinders for the Lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request,"

### **ANALYSIS CERTIFICATION**

METHOD O	F PREPARATI	CON : GRA	VIMETRIC /	PRESSURE !	Transfillii	NG	
METHOD O	F ANALYSIS	: IR Bre	ath Alcoho	l Analyzer			
ACCURACY	: ± 0.002			• •			
& QTY.	сомр. 1 с <sub>2</sub> н <sub>5</sub> он	COMP. 2 N <sub>2</sub>	COMP. 3	COMP. 4	COMP. 5	COMP. 6 Exp	p Date
1486624 (8)		BALANCE				04	/26/24
******				*****			

### TRACEABILITY

Preparation:

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited Company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.

Calibration test 219908, 219911, 219909, or 219926 dated,

6th January 2021 applies.

WEIGHT SETS USED: Kit#80141, Test#3094344A, Kit#106, 27, 103, 107, 113, 22, Test#VA-21-12587-L,F,T,P, Kit#IM1966, Test#VA-21-12587N, Kit#35, 104, 39, 105, 108, 109, 111 Test#VA-21-12587-I.

No affecting environmental conditions during analysis.

CALGAZ calibration devices were found to meet all applicable requirements of the National Highway Traffic Safety Administration Model Specifications for calibrating units for breath alcohol testers.

REQUESTED BY : DRAEGER INC

CUSTOMER PURCHASE ORDER NUMBER: US44302368647

PACKING LIST NUMBER: 21272590

CERTIFICATION DATE: April 26, 2021

ANALYSIS BY :

Quality Representative

"We certify that all the cylinders for the Lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."

### **ANALYSIS CERTIFICATION**

METHOD OF	PREPARATI	ON : GRAV	IMETRIC /	PRESSURE !	ransfilli	ЯG	
METHOD OF	F ANALYSIS	: IR Brea	th Alcoho	l Analyzer			
	: ± 0.002			_			
LOT NO. & QTY.	COMP. 1 C <sub>2</sub> H <sub>5</sub> OH	COMP, 2 N <sub>2</sub>	COMP. 3	COMP. 4	COMP. 5	COMP. 6	Exp Date
1346773 (24)		<b>ይ</b> ልፕ. <b>ል</b> ርድ					07/08/23
	<b>~~~~</b>						

### TRACEABILITY

Preparation:

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited Company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.

Calibration test 121088, 121097, 121091, or 121100 dated,

18th January 2019 applies.

WEIGHT SETS USED: Kit #92231, Test #2740564, Kit # 03610, Test # VA-19-1135 T3 Test # VA-19-11350B, T5 Test #VA-19-11350F, VA-19-11350E, VA-19-11350D, IM1966 Test VA-18-11340H

No affecting environmental conditions during analysis.

CALGAZ calibration devices were found to meet all applicable requirements of the National Highway Traffic Safety Administration Model Specifications for calibrating units for breath alcohol testers.

REQUESTED BY : DRAEGER INC

CUSTOMER PURCHASE ORDER NUMBER: UH54302105642

PACKING LIST NUMBER: 16572762

CERTIFICATION DATE: July 8, 20

ANALYSIS BY :

Quality Representative

"We certify that all the cylinders for the Lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."

## CERTIFICATE OF ANALYSIS EBS - ETHANOL BREATH STANDARD

DRAEGER INC HOUSTON HOUSTON, TX 77085 REF#: 22053560

DOC#: US44302425104 CUST. ITEM #: 4401040 DATE: Jul. 16, 2021

METHOD OF ANALYSIS: IR Breath Alcohol Analyzer

ANALYTICAL ACCURACY: +/-0.002 BrAC or +/-2% whichever is greater.

CALGAZ LOT#: 1523726

ETHANOL IN NITROGEN

PRODUCT EXPIRATION: Jul. 16, 2024

COMPONENT	PPM	(BrAC)
ETHANOL NITROGEN	416.8 BAL	(0.160)

REFERENCE STANDARD

CYLINDER

CONCENTRATION PPM

N.M.I. TRACEABLE STANDARDS\*

ND50144

260.6

#### TRACEABILITY

Preparation:

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.

Calibration test 219908, 219911, 219909, or 219926 dated, 6th January 2021 applies.

Analytical:

Analytical Instruments Calibrated Using NMI Traceable Standards. Certification Numbers: ND50144-20201218, A679, ND18363-20191203, A650

No affecting environmental conditions during analysis.

\*NMI is recognized by NIST through the Mutual Recognition Agreement (CIPM MRA).

CALGAZ calibration devices were found to meet all applicable requirements of the National Highway

Traffic Safety Administration Model Specifications for calibrating units for breath alcohol testers.

MANUFACTURED DATE: Jul. 16, 2021

CALGAZ CYLINDER SIZE: 6D

APPROVED BY :

"We certify that all the cylinders for the Lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."

<sup>\*</sup> Certification traceability is recognized by NIST through the CIPM MRA.

## CERTIFICATE OF ANALYSIS EBS - ETHANOL BREATH STANDARD

DRAEGER INC HOUSTON HOUSTON, TX 77085

REF#: 21766042

DOC#: US44302404557 CUST. ITEM #: 4401041 DATE: Jun. 11, 2021

METHOD OF ANALYSIS: IR Breath Alcohol Analyzer

ANALYTICAL ACCURACY: +/-0.002 BrAC or +/-2% whichever is greater.

CALGAZ LOT#: 1495468

ETHANOL IN NITROGEN

PRODUCT EXPIRATION: May. 14, 2024

COMPONENT	ррм	(BrAC)
ETHANOL NITROGEN	781.5 BAL	(0.300)

REFERENCE STANDARD

CYLINDER

CONCENTRATION PPM

N.M.I. TRACEABLE STANDARDS\*

ND50144

260.6

#### TRACEABILITY

### Preparation:

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.

Calibration test 219908, 219911, 219909, or 219926 dated, 6th January 2021 applies.

### Analytical:

Analytical Instruments Calibrated Using NMI Traceable Standards. Certification Numbers: ND50144-20201218, A679, ND18363-20191203, A650

No affecting environmental conditions during analysis.

\*NMI is recognized by NIST through the Mutual Recognition Agreement (CIPM MRA).

CALGAZ calibration devices were found to meet all applicable requirements of the National Highway

Traffic Safety Administration Model Specifications for calibrating units for breath alcohol testers.

MANUFACTURED DATE: May. 14, 2021

CALGAZ CYLINDER SIZE: 6D

APPROVED BY :

"We certify that all the cylinders for the Lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."

<sup>\*</sup> Certification traceability is recognized by NIST through the CIPM MRA.



COLONEL NEW JERSEY STATE POLICE

COLONEL NEW JERSEY STATE POLICE

ORIGINAL COURS	E DATES	
DATE 1.	Refresher Course PLACE	INSTRUCTOR
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9.		
S.P. 293B (Rev. 01/18)		

Tam and Hublic Safet This is to certify that Safet Kevin W. Alcott
New Jersey State Police IS QUALIFIED AND COMPETENT TO CONDUCT CHEMICAL BREATH ANALYSES PURSUANT TO CHAPTER 142 OF
THE LAWS OF 1966 IN THE OPERATION OF THE ALCOYEST 9510  AMERINDO TO DETERAINS INTOXICATION. OR WINENWESS MY MEMO AT TREATON, NEW ZERSEY THIS 8th DAY OF JUNE
TWO THOUSAND AND TWENTY ONE

	Refresher Course	
DATE	PLACE	INSTRUCTOR
		····
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