WAKA KOTAHI
NZ TRANSPORT AGENCY

Heavy vehicle specialist certificate
Must be presented to a CoF (heavy) inspecting organisation if not entered into LANDATA

Heavy vehicle specialist inspector's or manufacturing inspecting organisation's name (PRINT IN CAPS)

CHRIS CLARKE

ID CJC

Plate number (optional)

VIN/chassis number

`7 A 9 E 2 0 0 1 8 N 2 0 2 3 1 5 8`

Make DOMETT

Component being certified:

☐ Log bolsters	☐ Chassis	☐ Load anchorage
☐ SRT	☐ Towing connection	**X** Brakes
☐ Swept path	☐ PSV stability	☐ PSV rollover
	☐ PBS	

Model (optional) E2001 PH

Certification category HVEK

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015/5: NZ HEAVY VEHICLE BRAKE SPECIFICATION.

CARRY OUT BRAKE CALCULATIONS, INSPECTION AND ECU END OF LINE PROTOCOL.

5AFT CURTAINSIDE   **RSS ON TYRE:** 265 70 R19.5

FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.

REASON FOR CERTIFICATION: NEW TRAILER BUILD

Code/standard/rule certified to
LTR 32015/5

Component load rating(s)

32 Tonnes GVM

16 Tonne (Front brake mass)

19 Tonne (Rear brake mass)

General drawing number(s)
N/A

Supporting documents

BRAKE RULE CERTIFICATE	JH220314
BRAKE CALCULATION #	TP52471

Special conditions (optional)

WARNING LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON & THEN

EXTINGUISH IMMEDIATELY OR WHEN VEHICLE SPEED EXCEEDS 7 KM/H

Certification expiry date (if applicable)
N/A [UNLESS MODIFIED]

or

Hubodometer reading (whichever comes first)

Declaration

I the undersigned, declare that I am the heavy vehicle specialist inspector identified and I hold a current valid appointment. I certify that the above mentioned vehicle component's design, manufacture and installation, and this certification complies in all respects with the Land Transport Rule: Vehicle Standards Compliance 2002 and my appointment. To the best of my knowledge the information contained in the certificate is true and correct.

Designer's ID (if different from inspector below)
JOHN HIRST   J E H

Inspector's signature

Inspector's name (PRINT IN CAPS)
CHRIS CLARKE

ID number CJC

Date
10.03.2022

Number
819382

CoF vehicle inspector ID (if applicable)

CoF vehicle inspector signature (if applicable)

Date

All fields are mandatory unless otherwise stated.

WABCO START-UP LOG

System	Trailer EBS-E	WABCO part number	480 102 080 0
Production date	2021-10-13	Serial number	897040508300A
Serial number (modulator)	000000543517		
Fingerprint Customer EOL / Customer Development / Flash Program	W5C3643 / 2022-03-10 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

WABCO — TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.00
TDB0749

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS	GIO	Pin1	Pin3	Pin4
TYP TYPE TYPE	5AFT CURTAIN SIDE	1	---	---	---
		2	---	---	---
VEHICLE IDENT. NUMBER CHASSIS NUMBER NUMERO DE CHASSIS	7A9E20018N2023158	3	ALS2	ALS2	---
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP52471A	4	---	---	---
		5	DIAG	DIAG	DIAG
POLRADZÄHNEZAHL c-d | e-f POLE WHEEL TEETH c-d | e-f DENTS ROUE DENTÉE c-d | e-f 90 90	ABS-System ABS-System Système ABS 4S/3M	6	---	---	---
		7	---	---	---

RSS	Einfachbereifung Single Tire Monte simple		Lenkachse Steering axle Essieu vireur	
RSS	Zwillingsbereifung Twin Tire Monte jumelée	X	Kippkritisches Fahrzeug Critical Trailer Véhicule critique	

Subsystems	SB	I/O	24N

													(bar)	
	pm (bar)		6.5	pm (bar)		0.8	2.0	---	6.5				1.0	Pz
ACHSE AXLE ESSIEU									pz	TYP TYPE	(mm)	(mm)	TR (daN)	
1	1550	0.6	2.0	8000	5.1	0.4	1.3	---	5.9	-	20	65	69	504	4287
2	1550	0.6	2.0	8000	5.1	0.4	1.3	---	5.9	-	20	65	69	504	4287
3	1300	0.5	1.7	6350	4.0	0.3	1.4	---	4.8	-	14 / 16	64	69	484	2870
4	1300	0.5	1.7	6350	4.0	0.3	1.4	---	4.8	-	14 / 16	64	69	484	2870
5	1300	0.5	1.7	6350	4.0	0.3	1.4	---	4.8	-	14	64	69	484	2870

TEBS-E

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light supply	OK
EBS pressure test	OK	Lifting axle test	Not tested
Redundancy test	OK	ECAS height sensor calibration	Not tested
ABS sensor assignment	OK	Height sensor axle load	Not tested
RTR test	Not tested	Leak test	Not tested
Immobilizer test	Not tested	Signal outputs	Not tested
Signal inputs	Not tested	Tag axle test	Not tested

Electronic Extension Module

Diagnostic memory	Not tested	Signal outputs	Not tested
TailGUARDlight	Not tested	TailGUARD	Not tested

Manufacturer	DOMETT TRAILERS	Vehicle ident. no.	7A9E20018N2023158
Vehicle type	5AFT CURTAIN SIDE	Odometer reading	0.0 km
Next service	0 km	Trip reading	0.0 km
Tester	Chris Clarke		
Date	2022-03-10 3:22:11 pm	Signature	

distribution: DOMETT TRAILERS
                7A9E20018N2023158
                SODC: JH220314
                LT400: CJC 819382

vehicle manufacturer: DOMETT TRAILERS

trailer model   :   5AFT CURTAIN SIDE

trailer type   :   5-axle-full-trailer

remarks   :   air / hydraulic / VA suspension
                       WABCO TRAILER - EBS E
                       TRISTOP 3+4: T.14/24 [TSE1416HTLD64 ACTUALLY FITTED -
                       SEE PAGE 7 FOR PERFORMANCE DATA]
                       265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF,   SBW 1937,   TDB 0749 ECE,

			unladen	laden
total mass	P in kg		7000	35050
axle 1	P1 in kg		1550	8000
axle 2	P2 in kg		1550	8000
axle 3	P3 in kg		1300	6350
axle 4	P4 in kg		1300	6350
axle 5	P5 in kg		1300	6350
wheel base	E in mm	7650 -	7750	
centre of gravity height	h in mm		1030	2100

		axle 1	axle 2	axle 3	axle 4	axle 5
no. of combined axles		1	1	1	1	1
no. of brake chambers per axle line	KDZ	2	2	2	2	2
The power output corresponds to		BZ 122.1	BZ 122.1	BZ 119.6	BZ 119.6	BZ 122.1
brake chamber manufacturer		Meritor	Meritor	Meritor	Meritor	Meritor
chamber size		20.	20.	T.14/24	T.14/24	14.
lever length	lBh in mm	69	69	69	69	69
brake factor	[-]	23.03	23.03	23.03	23.03	23.03
dyn. rolling radius	rdyn min in mm	421	421	421	421	421
dyn. rolling radius	rdyn max in mm	421	421	421	421	421
threshold torque	Co Nm	6.0	6.0	6.0	6.0	6.0

calculation:

		axle 1	axle 2	axle 3	axle 4	axle 5
chamber pressure(rdyn min)pH at z=22,5%bar		2.2	2.2	2.1	2.1	2.1
chamber pressure(rdyn max)pH at z=22,5%bar		2.2	2.2	2.1	2.1	2.1
chamber press.(servo)pcha at pm6,5bar bar		5.9	5.9	4.8	4.8	4.8
piston force ThA at pm6,5bar N		6825	6825	4586	4586	4586
brake force(rdyn min)T lad. at pm6,5bar N		51709	51709	34623	34623	34623
brake force(rdyn max)T lad. at pm6,5bar N		51709	51709	34623	34623	34623
Brake force incl. 1 % rolling resistance proportion	%	22.3	22.3	18.5	18.5	18.5

braking rate   z laden   0.603   for rdyn min
z = sum (TR)/PRmax   0.603   for rdyn max

Trailer may only be operated in combination with trucks/tractors with
ISO 7638 supply (5 or 7 polar).

brake diagram :

maximum pressure: 8.5 bar

axle 1:
   valve 1: 971 002 ... 0   WABCO
         EBS emergency valve

   valve 2: 480 207 0.. 0   WABCO   or 480 207 2.. 0
         EBS relay valve

   brake cylinder: Meritor   20HSCLD65

axle 2:
   valve 1: 971 002 ... 0   WABCO
         EBS emergency valve

   valve 2: 480 207 0.. 0   WABCO   or 480 207 2.. 0
         EBS relay valve

   brake cylinder: Meritor   20HSCLD65

axle 3:
   valve 1: 971 002 ... 0   WABCO
         EBS emergency valve

   valve 2: 480 102 ... 0   WABCO
         EBS trailer modulator

   brake cylinder: Meritor   1424HTLD64

axle 4:
  valve 1: 971 002 ... 0   WABCO
         EBS emergency valve

 valve 2: 480 102 ... 0   WABCO
         EBS trailer modulator

  brake cylinder: Meritor   1424HTLD64

axle 5:
  valve 1: 971 002 ... 0   WABCO
         EBS emergency valve

  valve 2: 480 102 ... 0   WABCO
         EBS trailer modulator

  brake cylinder: Meritor   14HSCLD64

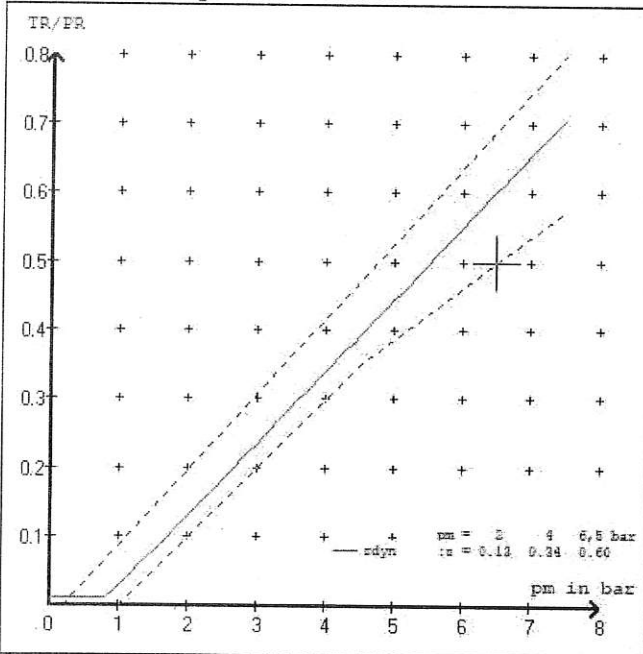| test type III	(z_{III} = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5
at pm 3.6 bar =>		pcha in bar :	3.0	3.0	2.6	2.6	2.6
test type III	(z_{III} = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5
at pm 1.3 bar =>		pcha in bar :	0.8	0.8	0.8	0.8	0.8

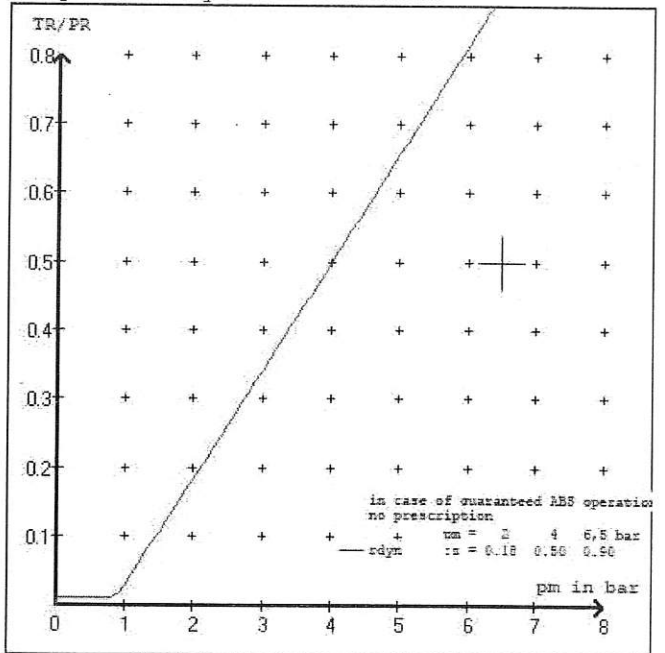## brake chamber pressure   laden
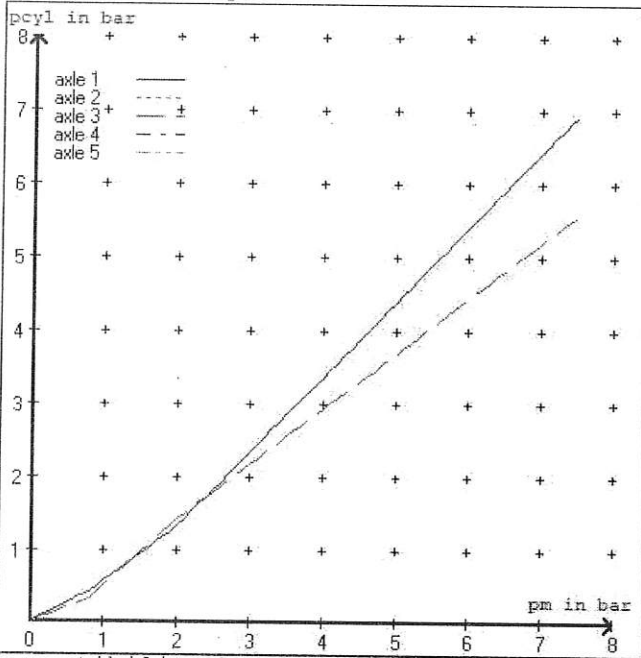
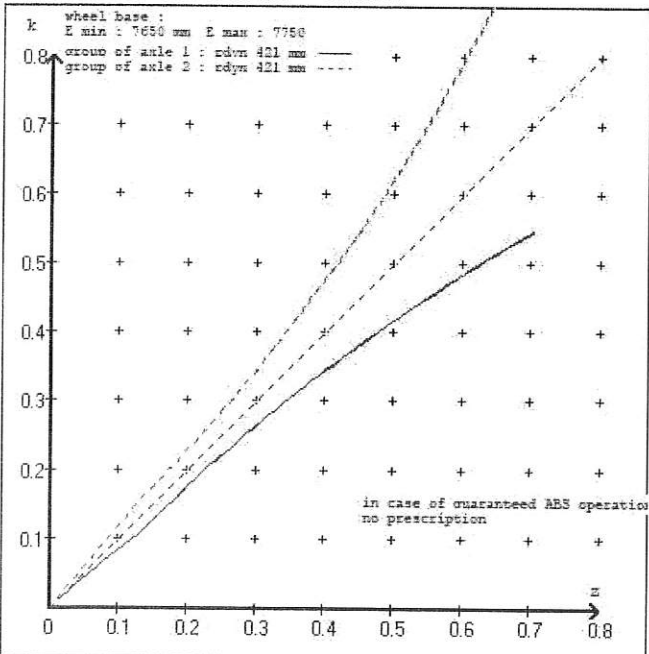## brake chamber pressure   unladen
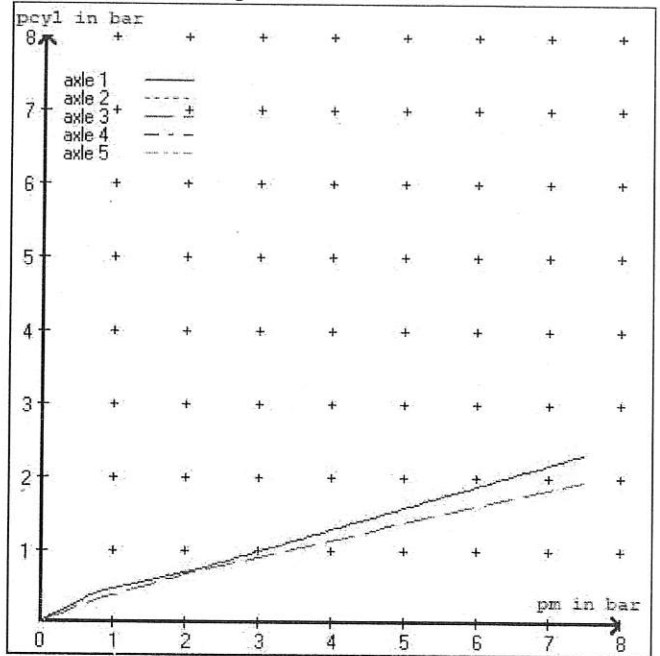
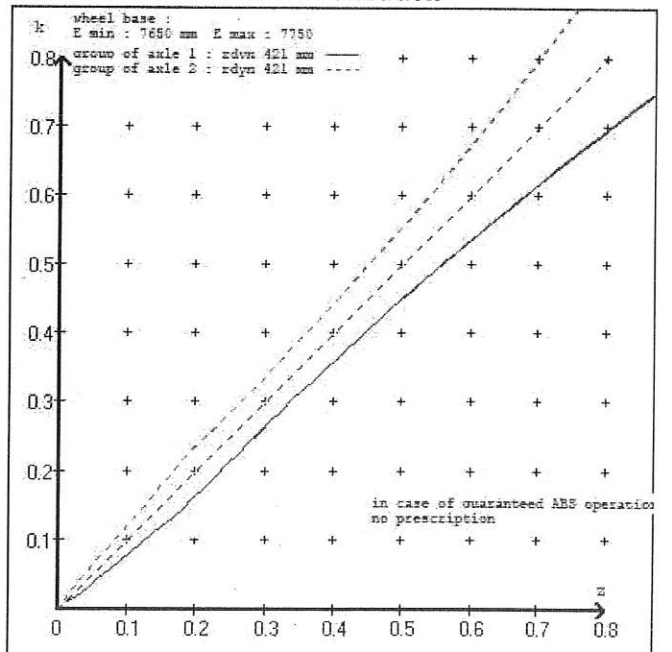## compatibility band   laden

compatibility band   unladen

curves of friction   laden

curves of friction   unladen

vehicle manufacturer: DOMETT TRAILERS
trailer model   : 5AFT CURTAIN SIDE
trailer type   : 5-axle-full-trailer

brake chamber and lever length :
axle 1 :   2 x type/diameter   20.   (Meritor)   lever length 69 mm
axle 2 :   2 x type/diameter   20.   (Meritor)   lever length 69 mm
axle 3 :   2 x type/diameter   T.14/24 (Meritor)   lever length 69 mm
axle 4 :   2 x type/diameter   T.14/24 (Meritor)   lever length 69 mm
axle 5 :   2 x type/diameter   14.   (Meritor)   lever length 69 mm

brake diagram :

valve :
971 002 ... 0   WABCO EBS emergency valve
480 207 0.. 0   WABCO EBS relay valve   or 480 207 2.. 0
480 102 ... 0   WABCO EBS trailer modulator

EBS input data
==============
vehicle manufacturer: DOMETT TRAILERS
trailer model   : 5AFT CURTAIN SIDE
trailer type   : 5-axle-full-trailer
brake calculation no.   : TP 52471A

tire circumference main axle   : 2650 for rdyn max
tire circumference auxiliary axle   : 2650 for rdyn max

assignment pm / deceleration z: pm 0.8 bar z = 0.010
(laden condition)   2.0 bar z = 0.134
                                   6.5 bar z = 0.600

| axle | axle load unladen | bellow pr. unladen | brake pr. unladen | axle load laden | bellow pr. laden | 0.8 | 2.0 | 6.5 |
						brake pr. laden		
1	1550	to be	2.0	8000	to be	0.4	1.3	5.9
2	1550	entered by	2.0	8000	entered by	0.4	1.3	5.9
3	1300	the vehicle	1.7	6350	the vehicle	0.3	1.4	4.8
4	1300	manufact.	1.7	6350	manufact.	0.3	1.4	4.8
5	1300		1.7	6350		0.3	1.4	4.8

(control pressure pm 6,5 / control pressure pm 0.8 2.0 6.5)

The unladen values indicated in the above table are values for the
basic parameter set. Higher unladen axle loads and liftaxles are
automatically recognized and do not require separate adjustment.
The above unladen axle loads must not be fallen below.
==

| axle 1 | | axle 2 | | axle 3 | | axle 4 | | axle 5 | |
axle load	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl
1550	2.0	1550	2.0	1300	1.7	1300	1.7	1300	1.7
2050	2.3	2050	2.3	1800	2.0	1800	2.0	1800	2.0
2550	2.6	2550	2.6	2300	2.3	2300	2.3	2300	2.3
3050	2.9	3050	2.9	2800	2.6	2800	2.6	2800	2.6
3550	3.2	3550	3.2	3300	2.9	3300	2.9	3300	2.9
4050	3.5	4050	3.5	3800	3.2	3800	3.2	3800	3.2
4550	3.8	4550	3.8	4300	3.5	4300	3.5	4300	3.5
5050	4.1	5050	4.1	4800	3.8	4800	3.8	4800	3.8
8000	5.9	8000	5.9	6350	4.8	6350	4.8	6350	4.8

data sheet to ECE vehicle type-approval certificate concerning braking
equipment: according to ECE R13 annex 11

```
axle 1 : reference axle: SAF       SBW 1937              brake lining: Jurid 539
         test report    :          TDB 0749 ECE          date       : 20130930 30.09.2013
axle 2 : reference axle: SAF       SBW 1937              brake lining: Jurid 539
         test report    :          TDB 0749 ECE          date       : 20130930 30.09.2013
axle 3 : reference axle: SAF       SBW 1937              brake lining: Jurid 539
         test report    :          TDB 0749 ECE          date       : 20130930 30.09.2013
axle 4 : reference axle: SAF       SBW 1937              brake lining: Jurid 539
         test report    :          TDB 0749 ECE          date       : 20130930 30.09.2013
axle 5 : reference axle: SAF       SBW 1937              brake lining: Jurid 539
         test report    :          TDB 0749 ECE          date       : 20130930 30.09.2013
```

calc. verif. of residual (hot) braking force type III
(item 4.2.1 of appendix 2 to annex 11)

```
axle 1              (rdyn 421 mm)          T = 24.3 % Fe
axle 2              (rdyn 421 mm)          T = 24.3 % Fe
axle 3              (rdyn 421 mm)          T = 18.2 % Fe
axle 4              (rdyn 421 mm)          T = 18.2 % Fe
axle 5              (rdyn 421 mm)          T = 18.2 % Fe
```

calculated actuator stroke in mm
(item 4.3.1.1 of appendix 2 to annex 11)

```
axle 1              (sp = 58 mm)           s = 39 mm
axle 2              (sp = 58 mm)           s = 39 mm
axle 3              (sp = 56 mm)           s = 39 mm
axle 4              (sp = 56 mm)           s = 39 mm
axle 5              (sp = 56 mm)           s = 39 mm
```

average thrust output in N at pm = 6,5 bar (however max. pcha = 7,0 bar)

```
axle1                                  ThA = 6825 N
axle2                                  ThA = 6825 N
axle3                                  ThA = 4586 N
axle4                                  ThA = 4586 N
axle5                                  ThA = 4586 N
```

calc. residual (hot) braking force in N
(item 4.3.1.4 of appendix 2 to annex 11)

```
axle 1              (rdyn 421 mm)          T = 40393 N
axle 2              (rdyn 421 mm)          T = 40393 N
axle 3              (rdyn 421 mm)          T = 27098 N
axle 4              (rdyn 421 mm)          T = 27098 N
axle 5              (rdyn 421 mm)          T = 27098 N
```

	basic test of subject trailer (E)	type III (calculated) residual (hot)braking
braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	0.47
required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.36)

```
axle 1              (rdyn 421 mm)          T = 40393 N
axle 2              (rdyn 421 mm)          T = 40393 N
axle 3              (rdyn 421 mm)          T = 27098 N
axle 4              (rdyn 421 mm)          T = 27098 N
axle 5              (rdyn 421 mm)          T = 27098 N
```

	basic test of subject trailer (E)	type III (calculated) residual (hot)braking
braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	0.47
required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.36)

spring parking brake

	axle 3	axle 4
no of TRISTOP-actuators per axle line KDZ	2	2
TRISTOP-actuator type	T.14/16	T.14/16
lever length lBh in mm	69	69
stat. tyre radius rstat max in mm	401	401
at a stroke of s in mm	30	30
min. force of spring brake TFZ in N	6160	6160
sp.brake chamber no Meritor.....	4	4
release pressure pLs in bar		
	4.8	4.8

calculation:

ratio until road	3.9674	3.9674
iFb = lBh*Eta*C*rBt/(rBn*rstat)		
for rstat in mm	401	401
brake force of spring br. Tf in N	48188	48188
Tf = (TFZ*KDZ-2*Co/lBh)*iFb		
braking rate zf laden	0.290	
zf = sum (Tf)/P + 0,01		

Test of the frictional connection required by the parking brake

minimum wheelbase/minimum supporting width min Ef necessary
to fulfil the regulations

$$min\ Ef = E * (1 - PR/P + zferf * h/E) / (1 - zferf / (fzul * nf/ng))$$

min Ef =   5842 mm   for E =   7650 mm
==================
min Ef =   5911 mm   for E =   7750 mm
==================

|			
min Ef	=		minimum distance between front axle(s) (trailer) or support (semitrailer) and the rear axle(s) (resultant of the bogie)
E	=		wheel base
fzul	=	0.80	maximum permissible frictional connection required
zferf	=	0.18	maximum required braking ratio of the parking brake
h	=	2100 mm	height of center of gravity - laden
PR	=	19050 kg	maximum bogie mass - laden
P	=	35050 kg	maximum total mass - laden
nf	=	2	no. of axle(s) with TRISTOP spring brake actuators
ng	=	3	no. of bogie axle(s)

reference values

reference values for z = 50%   for max rdyn: 421 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0	5045	
	5.9	42876	
axle 2	1.0	5045	
	5.9	42876	
axle 3	1.0		4848
	4.8		28709
axle 4	1.0		4848
	4.8		28709
axle 5	1.0		4848
	4.8		28709

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	T.14/24	T.14/24	14./
Maximum stroke smax = ...mm maximaler Hub smax = ...mm	65	65	64	64	64
Lever length = ...mm Hebellänge = ...mm	69.08	69.08	69.08	69.08	69.08
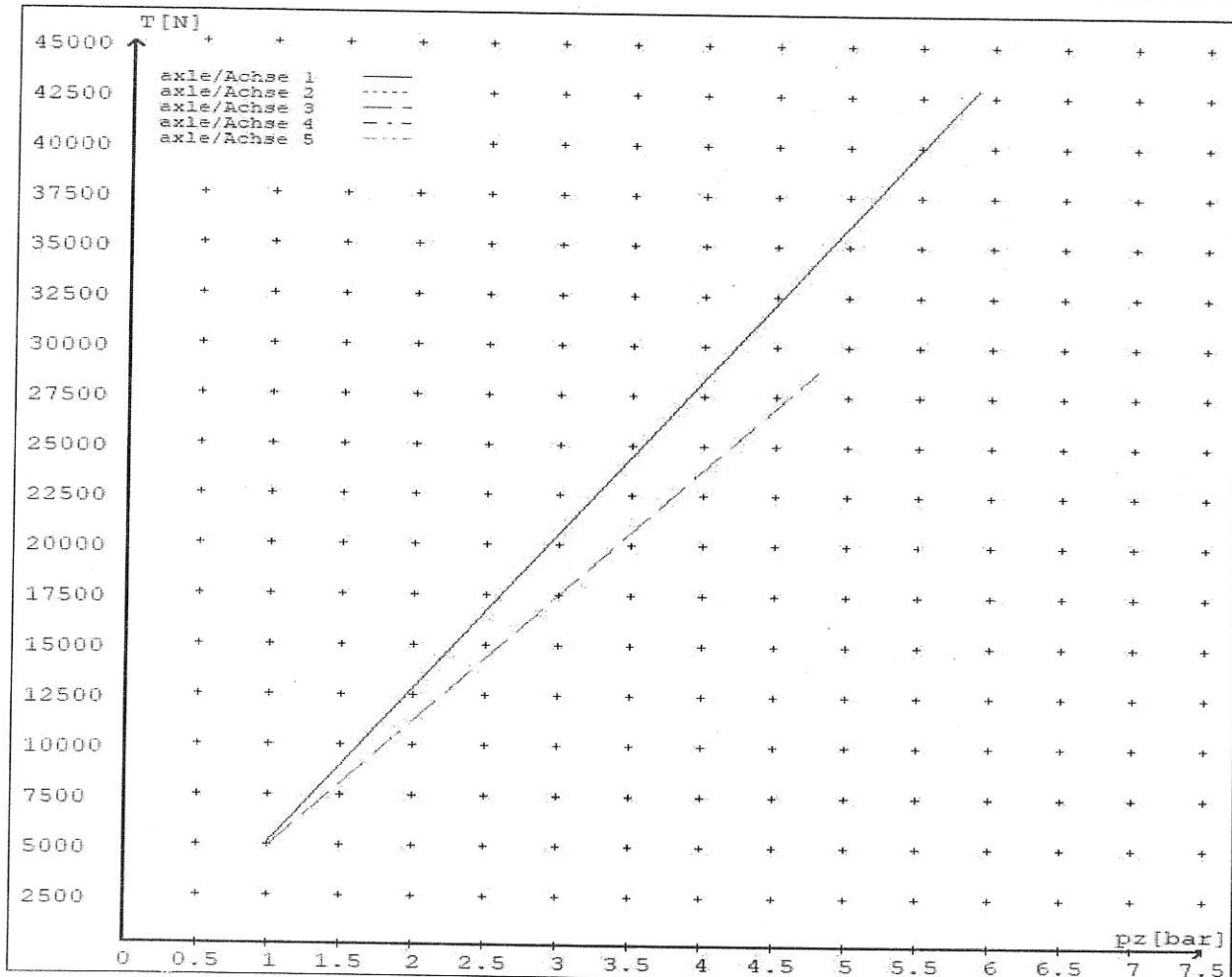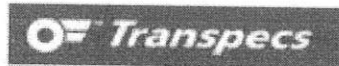
NOTICE TO VEHICLE OPERATOR

THIS VEHICLE HAS A BRAKE SYSTEM WHICH HAS BEEN DESIGNED AND FITTED IN ACCORDANCE WITH THE LAND TRANSPORT HEAVY VEHICLE BRAKE RULE 32015/5.

IF THIS VEHICLE IS OPERATED IN CONJUNCTION WITH NON-CERTIFIED VEHICLES, THERE MAY BE OPERATIONAL FACTORS WHICH NEED TO BE TAKEN INTO CONSIDERATION.

PLEASE REFER TO THE CERTIFIER FOR FURTHER INFORMATION.

EXCERPT FROM LAND TRANSPORT RULE; HEAVY VEHICLE BRAKES RULE 32015/5. SECTION 10,

10.1 RESPONSIBILITIES OF OPERATORS

> A person who operates a vehicle must ensure that the vehicle complies with this rule.

10.2 RESPONSIBILITIES OF REPAIRERS
> A person who repairs or adjusts a brake must ensure that the repair or adjustment:

a) does not prevent the vehicle from complying with this rule;

b) complies with Land Transport Rule: Vehicle Repair 1998.

10.3 RESPONSIBILITIES OF MODIFIERS
> A person who modifies a vehicle so as to affect the braking performance of the vehicle must:

a) ensure that the modification does not prevent the vehicle from complying with this Rule; and

b) notify the operator that the vehicle must be inspected and, if necessary, certified by person or organisation appointed to carry out specialist inspection and certification of heavy vehicle brakes.

IF YOU ARE UNSURE ABOUT YOUR RESPONSIBILITIES, PLEASE CONTACT THE VEHICLE MANUFACTURER, OR MYSELF.

COMPLAINTS. Complaints and Warranty issues which relate to Brake Certification will be acknowledged within 7 working days and a resolution proposed within 25 working days. Resolution of complaints and Warranty issues is subject to Transpecs Warranty policy. Customers have the right to appeal to the New Zealand Transport Authority if dissatisfied with a Compliance issue. (Refer NZTA Deed Of Appointment Para 47.4) <u>NZTA Helpdesk 0800 699 000</u>

NOTICE TO VEHICLE OPERATOR

This trailer is equipped with an Electronic Brake System.

To comply with the New Zealand Heavy Vehicle Brake Rule 32015/5, it must be used only in conjunction with a truck/tractor equipped with a 5 or 7 pin ABS/EBS power supply socket.
Failure to connect to such supply invalidates Brake Rule compliance.

The trailer ABS/EBS warning light on the towing vehicle dashboard must illuminate when the ignition is switched on and extinguish when the vehicle is in motion.
If the light does not illuminate when ignition is switched on, the system must be checked. If the light remains illuminated when the vehicle is in motion, Brake Rule compliance is compromised. Repairs must be made as soon as possible.

If you are unsure of your responsibilities and/or obligations, please contact either the vehicle manufacturer or myself.

J E Hirst
(JEH HVEK)
(09 980 7300)

NOTICE TO VEHICLE OPERATOR

WABCO Park Release Emergency Valve
(PREV)

This trailer is equipped with a WABCO PREV
Part # 971 002 900 0

Application of the park brake via the cab control valve will actuate and apply all service brakes on the trailer. In the event of a leak in the service brake system the Spring Brakes will automatically override and hold the vehicle in compliance to Land Transport Rule: Heavy-vehicle Brakes Rule 32015/5.

When the vehicle is presented for COF the trailer park brake system is tested by pulling the red actuation knob on the PREV, situated mid way down the chassis rail. The cab control in the prime mover does not have to be applied for this test procedure.

If you are unsure of any aspect relating to this instruction please contact either the vehicle manufacturer or myself.

J E Hirst
(JEH HVEK)
(09 980 7300)

NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015-5
WORKSHEET, PROCEDURE DOCUMENTATION SHEET
& CONFIRMATION OF COMPLIANCE

CLIENT

MANUFACTURER:	DOMETT TRAILERS
ADDRESS:	TAURIKURA DRIVE, TAURANGA 3110
FLEET:	OMOKOROA TRANSPORT

VEHICLE DETAILS

VEHICLE TYPE:	5AFT CURTAINSIDE	**CERT #:**	JH220314
YEAR:	2022	**CALCULATION #:**	TP52471
MAKE:	DOMETT	**REGO #:**	N/A
MODEL:	E2001 PH	**LT400 #:**	
CHASSIS #:	2158	**ORDER #:**	8646
VIN #:	7A9E20018N2023158		
GVM: *t*	32	**PRIME MOVER:**	EBS / EUROPEAN
LOAD CONFIGURATION:	MIXED FREIGHT		

GROUP RATINGS: *t*

FRONT	REAR
16	19

WHEEL BASE: *m*

7.7

UNLADEN COG *m*	MAX HEIGHT *m*	HEIGHT DECK *m*
1.03	4.3	1.09

COG: *m*

2.076

TARE: t

FRONT	REAR	TOTAL
3.1	4	7.1

TYRE SIZE:

FRONT	REAR
265 70 R19.5	265 70 R19.5

ROLLING CIRCUMFERENCE: *mm*

2645	2645

AXLE SPACING: *m*

1.31	2.51

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	SAF	SAF-ZI9W	TDB0749

POLE WHEEL FRONT:	90	**POLE WHEEL REAR:**	90
LINING MATERIAL:	JURID 539	**BRAKE FACTOR:**	23.03
SENSED AXLE(S):	2 + 4		**NOTES:**

SERIAL NUMBERS:

1		NG-IU28/2005
2		NG-IU28/2005
3		NG-IU28/2005
4		NG-IU28/2005
5		NG-IU28/2005

CHAMBER AND VALVING DETAILS

CHAMBERS:	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
BRAND:	TSE_CHAMBERS	TSE_CHAMBERS	TSE_CHAMBERS
SIZE:	20HSCLD	1416HTLD	14HSCLD
STROKE: *mm*	65	64	64
TEST REPORT #:	BC 0041.0 Jul '07	BC0143.0	BZ 122.1 Sep '00
SPRINGBRAKE FORCE: *kN*	N/A	6.16	N/A
HOLDOFF PRESSURE: *Bar*	N/A	4.8	N/A
FOUNDATION BRAKE:	WABCO PAN19	WABCO PAN19	WABCO PAN19
LEVER LENGTH: *mm*	69	69	69

BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. *kPa*
ECU PART #:	WABCO	480 102 08. 0 (MV)	80 kPa
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	80 kPa
ANTI-COMPOUNDING:	YES		
SPRING BRAKE RELAY:	WABCO_PREV	971 002 900 0	
YARD RELEASE VALVE:	WABCO-PREV	971 002 900 0	
INLINE RELAY FITTED:	N/A	N/A	

ECU DIRECTION: ☑ FRONT ☐ REAR **FRONT FRICTION: μ** 0.48

SUBSYSTEMS: ☐ SMARTBOARD ☐ OPTI-LINK ☐ CAN ROUTER 446 122 050 0

☐ ELEX 446 122 070 0 ☐ TAILGUARD

SUSPENSION

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	PNEUMATIC
MAKE:	SAF_AIRSPRING	SAF_AIRSPRING
MODEL:	SAF_INTRA	SAF_INTRA
BELLOW SIZE:	2619, 300mm	2619, 300mm
HEIGHT CONTROL VALVE:	HALDEX 90554950	HALDEX 90554950
OTHER VALVES:	N/A	N/A
RIDE HEIGHT mm :	260	260
HANGER HEIGHT mm :	200	200
PEDESTAL HEIGHT mm :	50	50
LIFTAXLE:		N/A
TIPPING DUMP SWITCH:		N/A
LIFTAXLE VALVE:		N/A
PRESSURE LIMITING:		N/A

AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2	
	FRONT	REAR
BRAKE TANK SIZE: L	46	46 + 25
AUXILLARY TANK SIZE: L	N/A	46
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0	

AIR LINES

TEST POINTS:

CONTROL LINE:	X 1	TANK:	X 1
REAR CHAMBER:	X 2	FRONT CHAMBER:	X 1
DUOMATIC COLOUR CODED:	YES		

ELECTRONIC HEIGHT SENSOR CALIBRATION

	TIMER TICKS [F/R]	MILLIMETRE [F / R]
UPPER LEVEL:	N/A	N/A
NORMAL LEVEL:	N/A	N/A
LOWER LEVEL:	N/A	N/A

CHECKS AT COMMISSION OF VEHICLE

CHAMBER BUNGS REMOVED:	☑	VALVE MOUNTING:	☑
ECU BLANKING PLUGS CHECKED:	☑		

RESPONSE TIME:	MODULATOR 2.1	MODULATOR 2.2	RELAY VALVE
ms:	200	215	370

NOTES AND SPECIAL CONDITIONS

FILES RECEIVED: 22.11.21

FILES CREATED & SENT TO CJC: 08.03.2022

FILES RETURNED AS COMPLETE:

REASON FOR CERTIFICATION: NEW TRAILER BUILD

I UNDERSTAND AND DECLARE THAT I AM THE CERTIFIER IDENTIFIED BELOW AND HOLD A CURRENT VALID APPOINTMENT. I CERTIFY THAT AT THE TIME OF INSPECTION THE ABOVE MENTIONED VEHICLE COMPONENT DESIGN AND THIS CERTIFICATION COMPLIES IN ALL RESPECTS WITH THE LAND TRANSPORT RULE VEHICLE STANDARDS COMPLIANCE 2002 AND MY DEED OF APPOINTMENT. TO THE BEST OF MY KNOWLEDGE THE INFORMATION CONTAINED IN THIS CERTIFICATE IS TRUE AND CORRECT.

NEW ZEALAND HEAVY VECHLE BRAKE RULE 32015/5, SCHEDULE 5.

DATE:	10/03/2022
SIGNED:	
CERTIFIER NAME & ID:	CHRIS CLARKE CJC
SODC BY:	JOHN HIRST JEH
PHONE (BUS):	09-980-7300
FAX:	
POSTAL ADDRESS:	P.O. Box 98-971, Manukau 2241 New Zealand