

## QR Bulk Traffic.

by Arthur Hayes

In this presentation, I would like to cover wagons used to move bulk loading around the Queensland Rail Network. I will leave bulk ISO containers for another time or for someone else.

In keeping with the Convention theme, the listing of wagons below will show the then and now in the transportation of bulk loading. It will also show how QGR started out as the pony railway and progressed to the modern world class rail operator of today hauling millions of tonnes each year.

I have included the year built to provide an era to which the traffic was carried in a particular wagon class. The year shown is taken from QR plans and may be an approximately guide only.

### Apples:-

Class	Year Built	Wheelset	Tare	Carry	Comments
VOAS		8 Wheeled	13t 12c	48t 8c	The Summit to Northgate



Loading apples into VAOA Wagons at "The Summit" Green and red apples were generally loaded into different wagons. (1995)

Wagons were conveyed to Brisbane, detached from trains at Normamby, Redbank, Acacia Ridge and then on suburban shunts to Bindha to the Golden Circle Cannery.

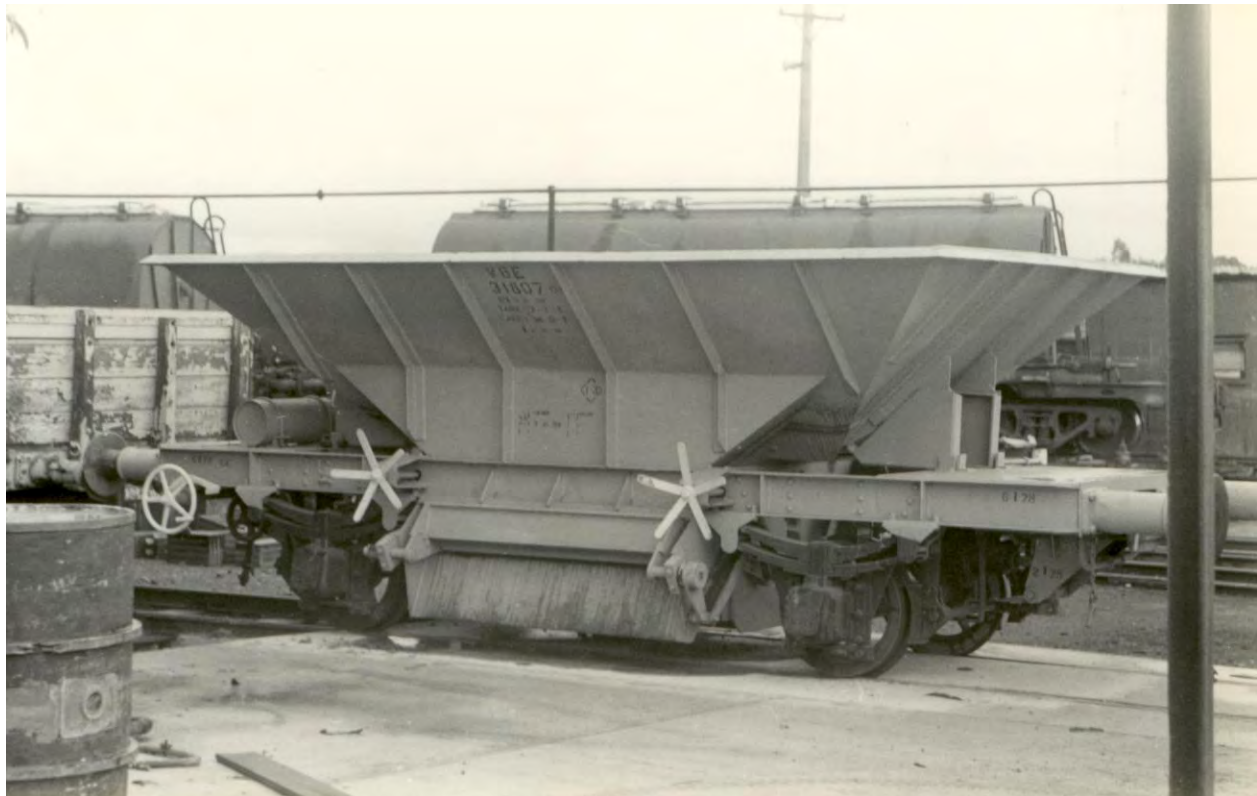
The wagons were unloaded signally, red one's first and then the green apples. This was the last rail traffic to be conveyed to the Cannery.

**Ballast:-**

Loading:- Bins/Ramp/Front endloader/ River bed.

Unloading:- On Track, Track side, Pit.

Class	Year Built	Wheelset	Tare	Carry	Comments
T		4 Wheeled	3t 3c	6t 15 c	2' side doors
U		8 Wheeled	6t 10c	13t 10c	2' side doors
VT		4 Wheeled			
VTH	1944	4 Wheeled	4t 16c	11t 4c	Timber
VTS	1907	4 Wheeled	4t 10c	11t 10c	Steel
VTT		4 Wheeled			
VTE	1960	4 Wheeled	6.1t	14t	
VTJ	1968	4 Wheeled	4t 17c	11t 3c	VJM U'frames
VJB	1980	4 Wheeled	6.1t	11.2t	49 Wagons converted from VJS
VBE	1987	4 Wheeled			VTE Frame, VTS Body, Side Dump
VBO	1979/83	8 Wheeled	18.8t	52.2	
VBZ	2000	8 Wheeled	19.5t	60.5t	Conv VBO
VBOS/L	1993	8 Wheeled	18.4	52.6	Tandem
VBZS/L	2000	8 Wheeled	19.4t	60.6t	Tandem
VBOS/LR	2005	8 Wheeled	19.8t	60.2t	Radio Controlled Doors
H/HSA		8 Wheeled			
SD	1979.83	8 Wheeled	25t	38t	Side Dump

**VBE Ballast Hopper**

## Ploughs

Class	Year Built	Wheelset	Tare	Carry	Comments
T		4 Wheeled	3t 3c	6t 15 c	
TE		4 Wheeled			
TES		4 Wheeled			
IJBX		8 Wheeled			



**“T” Class Ballast Plough Normanby**



**IJBX Plough at Banyo after being fitted with radio equipment.**



**Coal:-**

Coal was one of the first bulk freights carried, it was the fuel of the day for our locomotives and ships sailing around the world.

Loading:- Ramp/Overhead bins/Front end loader.

Unloading:- Pit onto conveyer belt, Pit pulled out by front endloader. Tippler

Traffic:- Power Houses, Paper mills, Hospitals, Export.

<b>Class</b>	<b>Year Built</b>	<b>Wheelset</b>	<b>Tare</b>	<b>Carry</b>	<b>Comments</b>
V		4 Wheeled	3t 5c/4 ton	6 t 15c	Various body types
VR	1919	4 Wheeled	4t 6c	11t 4 c	Various body types
VJ	1917	4 Wheeled	4t 15c	11t 5 c	Various body types
VO		4 Wheeled	4t 2c	11t 18c	
GVJM		4 Wheeled	5t 0c	11t 0c	Mt Isa Line
VJM	1949	4 Wheeled	5t	11t	Various versions from 1922
VJD	1968	4 Wheeled	5t 3c	10t 17c	Conv VJM. Tandem Dump
HV	1903	8 Wheeled	11t 16c	20t 4c	
VO	1964	8 Wheeled	18t 17c	50t 3c	Max Gross 69t
VAO	1967	8 Wheeled	13t 12c	48t 8c	Aluminium
VSO	1970	8 Wheeled	17t 19c	44t	34616
WHO	1962	8 Wheeled	18t	44t	
G	1970	8 Wheeled	12t 10c	57t 10c	Aluminium Gondola
GH	1979	8 Wheeled	13.4t	57.6t	
HSV	1928	8 Wheeled	11t 14c	20t 6c	Conv to HS (1962)
HJU	1968	8 Wheeled	13t 16c	20t 4c	4 Coke Bins
VAH	1975/76	8 Wheeled	15.5t	57.5	Aluminium Hopper
VAJ	1979/81	8 Wheeled	15.2t	57.8t	Aluminium Hopper
VAK	1979/81	8 Wheeled	15t	58t	Aluminium Hopper
VALK	1981/2	8 Wheeled	15.4t	57.6t	Aluminium Hopper
VALJ	1981/2	8 Wheeled	15.4t	57.6t	Aluminium Hopper
VAM	1981/82	8 Wheeled	15t	56t	Aluminium Hopper
VAL	1982/3	8 Wheeled	15.4	57.4t	Aluminium Hopper
VALL	1983/4	8 Wheeled	15.1	57.9t	VALL reclassified VLLM when fitted with tie-bar
VMMQ	1999	8 Wheeled	15.4t	64.6t	Conv VAM, add MR, Hungry boards, Kwik drop doors
VAZ	1983/4	8 Wheeled	17.1t	62.9t	Aluminium Hopper
VALL	1983/4	8 Wheeled	15.1t	57.9t	Conv VLL, add MR, Hungry boards, Kwik drop doors
VLLQ	1999	8 Wheeled	15.5t	64.5	Conv VLLM, add MR, Hungry boards, Kwik drop doors
VAG	1981	8 Wheeled	15.5t	57.5t	42763 (Vickers)
VSNB	1989/90	8 Wheeled	20.4t	69.6t	90t Gross
VSO	1996	8 Wheeled	49.1t	140 T	Close Coupled

VNQB	1998/9	8 Wheeled	20.1t	69.9t	Originally VSNB
VSAL/S	1998	8 Wheeled	20.4t	83.6t	104t Tandem
VSHL/S	1993/98	8 Wheeled	23.6	80.4t	100t Tandem
VSNL/S	1990/2	8 Wheeled	20.4	69.9t	90t Tandem
VEAL/S	2004	8 Wheeled	20.0t	86.0t	106t electric brakes
ZCAS	2006/9	8 Wheeled	20.0t	86.0t	106t Tandem

Q was added to various Coal Hoppers when fitted with Kwik Drop Doors in 1999.



**VSO Close coupled Hopper, Clapham 1999. Still under going testing today.**



### **VJM at Cannon Hill**

**Cement:-**

Loading:- Cement works on the coast.

Unloading:- Concrete plants, Mines

Traffic: Cement, Fly ash

Class	Year Built	Wheelset	Tare	Carry	Comments
FFC		4 Wheeled	6t 2c	9t 18c	Covered FF
FJC	1967	4 Wheeled	6t 18c	10t 2c	Conv FJS, 2 x 5t bins Or 1 x10t bin
VJC	1954	4 Wheeled	6.1t	11.2t	Conv VJM
HJC/F/T	1967	8 Wheeled	12t 13c	21t 7c	Conv HJS, 4 x 5t bins
SBC	1963	8 Wheeled	11t 18c	23t 10c	Conv 26' SJ. 4 x 5t bins
WBC	1961	8 Wheeled	10t 7c	26t	Conv MTW. 4 x 5t bins
PCC	1969	8 Wheeled	13t 10c	22t 10c	Conv HJS, Cement/Copper
PCCL	1980	8 Wheeled	17.3t	22.7t	Conv CMIS, Cement/Copper
PFCP	1972	8 Wheeled	22t 4c	13t 16c	Conv HJS
QFP	1980	8 Wheeled	22.5t	39.0t	Conv QFX. 4 hoppers
QFQ	1983/4	8 Wheeled	25t	38t	Conv QFC. 8 x 5t bins or 2x10t bins with 4x5t bins or 4x 10t hoppers or 40t Container
QPX	1979/82	8 Wheeled	23.3t	39.7t	Conv QFX, 40' Container (Pozzolanic)
QFXP		8 Wheeled	23.3t	39.7t	Conv QFX, 40' Container
HOQ	1986	8 Wheeled	23.8	39.2t	Conv HO
WCC	1988/90	8 Wheeled	17.5	26.5t	Conv WHE, 5 x 5t Bins
QPC	1988/9	8 Wheeled	23.9	39.1	Conv QFC

**QFQ Cement Wagons Cairns**

**Fertiliser:-**

<b>Class</b>	<b>Year Built</b>	<b>Wheelset</b>	<b>Tare</b>	<b>Carry</b>	<b>Comments</b>
HOF	1976	8 Wheeled	20.8t	42.4t	Trap roofs 86 Wagons Vertical black strip 150mm wide painted on each corner.
GNF	1975/6	8 Wheeled	18.1t	40.8t	Trap roofs 75/76 Sugar Season 10 Wagons.
VFMQ	1999	8 Wheeled	16.1t	6309t	Conv VAM (Mt Isa Line)
WHEF		8 Wheeled			
WHAF		8 Wheeled			

**WHEF at Pinkenba**



**Grain:-**

Loading:- Country Silos

Unloading:- Bulk Terminal at the port, Flour Mills, Transfer silos

Traffic: Malt/Wheat/Other Grains/Flour

Class	Year Built	Wheelset	Tare	Carry	Comments
WH/WHA	1953	8 Wheeled	11t 10c	25t	1971 Conv WHA
WHE	1959	8 Wheeled	13.4t	30.2t	
WHO	1962	8 Wheeled	18t	44t	Trap Cover
VJDG	1973	4 Wheeled	5t 13c	10t 7c	Dump Doors VJM
VJMG	1967	4 Wheeled	5.7t	10.5t	Conv VJM
GVJD		4 Wheeled	5t 13c	10t 7c	Dump Doors VJM Traps Top
GVJM		4 Wheeled	5.7t	10.5t	Conv VJM, Trap Top.
HSAG		8 Wheeled			Trap Cover.
QGX	1967/76	8 Wheeled	12.2t	36.5t	1989 classed QGA, Removal of buffers.
QGX/C	1971	8 Wheeled			Mods to loading hatches
QGXM	1976	8 Wheeled			Malt. Plastic foam sealed opening hatches.
VGY	1965	8 Wheeled	11t 16c	32t 4c	
HJM	1968	8 Wheeled	12.1t	24.5t	Conv HJS. Malt 3 bins
HJP	1973	8 Wheeled	11.9t	24.7t	Conv HJS. 3 bins Mayne Grain
MTWG		8 Wheeled	12.4t	24.5t	1 or 3 Capsules (17 wagons)
PF	1968	8 Wheeled	13t 2c	23t 2c	Flour/Malt
VAOG	1993	8 Wheeled	14.6	48.4t	Conv VAO.
VGH	2000	8 Wheeled	16.2t	47.3t	"Ecofab" Roof
VGK	2000	8 Wheeled	15.7t	47.8t	"Ecofab" Roof
VAHS	1989	8 Wheeled	16.5t	54.5t	Conv VAH, Steel/Trap Top

**VGH Dalby**



**Lime:-**

<b>Class</b>	<b>Year Built</b>	<b>Wheelset</b>	<b>Tare</b>	<b>Carry</b>	<b>Comments</b>
VO	1913	4 Wheeled			
WHO	1962	8 Wheeled	18t	44t	
FJL		4 Wheeled	6t 5c	10t 15c	2 Square Bins or one Tank
FJSL	1976	4 Wheeled	7.7t	9.6t	2 round bins painted blue Tamaree to BK Runcorn
VJLS	1969	4 Wheeled	5.1t	11t	Conv VJM, Tarpaulin Top
VJL		4 Wheeled	5.6t	10.5t	Mt Morgan Tfc
VLH	1997	8 Wheeled	26.2t	73.8t	Bomb-Bay Doors
HJL	1976/7	8 Wheeled			

**HJL Lime Wagon. South Johnstone**

**Minerals:-**

Loading:- Mines

Unloading:- Ports, Refineries

Traffic:- Magite, Ore

<b>Class</b>	<b>Year Built</b>	<b>Wheelset</b>	<b>Tare</b>	<b>Carry</b>	<b>Comments</b>
G	1970	8 Wheeled	12.7t	58.4t	Aluminium Gondola
GO	1975	8 Wheeled	13.6t	71t Gross	Aluminium Gondola Phosphate Ore TFC Mt Isa
GON		8 Wheeled			Allocated to Nickle Tfc
WHO	1962	8 Wheeled	18t	44t	Mt Isa Tfc
GN	1973	8 Wheeled	18.2t	79.4t Gross	Steel Gondola, Nickel Ore
GH	1979/80	8 Wheeled	13.4t	71t Gross	Aluminium Gondola
PHY	1991	8 Wheeled	18.4t	44.6t	Mineral Concentrate
WSO	1988	8 Wheeled	18.3t	44.7t	Conv WHO
WSOC	1988	8 Wheeled	19.2t	43.8t	Conv WHO Anode Racks
HMM	1990	8 Wheeled	11.8t	22.7t	Conv HJS Magnetite
HSM	1990	8 Wheeled	10.3t	26.5t	Conv HSA Magnetite
GSZY	1998	8 Wheeled	17.0t	62.3t	Ore Concentrate
GCOM	1996	8 Wheeled	15.0t	56.0t	Conv GO
GAZ	1999	8 Wheeled	15.0t	65.0t	Conv GCOM

**PHY Wagon Townsville**

**Molasses:-**

Loading:-

Unloading:-

Traffic:

Class	Year Built	Wheelset	Tare	Carry	Comments
SJ		8 Wheeled			
HJ/MJ		8 Wheeled		3,000 Gal+	Various Tank sizes
U		8 Wheeled		1,700 Gal	Various Tank sizes
OGE	1962	8 Wheeled	15.1t	17,730 Lts	Compressed Yeast Co.
MO	1978	8 Wheeled	20.4 t	29,000 Lts	
OWO	1993	8 Wheeled	17.2t		Conv WO's
VMO	1994	8 Wheeled	18.2t	32,400 Lts	Conv VO
VMOA		8 Wheeled			Modified VMO
PM	1983/88	8 Wheeled	15.2/3t	22.5t	BLC Frame
PTM	1988	8 Wheeled	12.4/15.2	14,197 / 15,372Lts	Conv HJS Frames HM Tanks
WM	1988	8 Wheeled	15.3t		Frame MTW, Tank HM
LTM		8 Wheeled		6000 Gal	Loco Tenders

**WM Townsville**



**Sand:-**

Class	Year Built	Wheelset	Tare	Carry	Comments
VJS		4 Wheeled			x VJM
FO		4 Wheeled			VJM underframe
FJS		4 Wheeled			Toowoomba/Charleville
PS		8 Wheeled	17t	19.6t	Loco sand. 4 Bins. x CMIS
PST		8 Wheeled	18.3t	22.3t	Loco sand. 4 Bins. x BLC
FSS	1974	4 Wheeled	7.8 t	12.12t	Loco sand FJS/FET
VSE	1965	4 Wheeled	6t 10c	14t	Conv. VTE Mineral Sand Tfc

**FO Rockhampton.**

**Sugar:-**

Loading:- Sugar Mills

Unloading:- Bulk Sugar Terminals

Traffic:

Class	Year Built	Wheelset	Tare	Carry	Comments
MTW	1943	8 Wheeled	10t 12 cwt	26t	4 Boxes
WHO	1962	8 Wheeled	18t	44t	Trap Top. Nambour Tfc
PYCM	1973	8 Wheeled	14t	34.8t	4 "H" Type Boxes
PCUM	1997/2000	8 Wheeled			QRST Sugar Containers
VAOS	1983	8 Wheeled	14.6	48.4t	Conv VAO. Sugar or Grain
VAKS	1982	8 Wheeled	16t	47t	Canopy opening covered by Tarp
VASO	1982/3	8 Wheeled	17.2t	45.8t	Townsville Sugar Tfc

**MTW with Sugar Boxes Cairns****Tallow:-**

Loading:- Meat Works

Unloading:- Roma Street

Class	Year Built	Wheelset	Tare	Carry	Comments
FET	1966	4 wheeled	7t 4 c	12t 16c	2,600 Gallons 73. 2 Mod for Molasses
FJT	1959	4 wheeled	7 t 1c	9t 11 c	2,000 Gallons FJS with doors removed.

**Tank Wagons:-**

Loading:- Coastal Terminals

Unloading:- Western Oil Depots, Power Houses, Meat Works, Loco Depots

Traffic: Fuel (All Types), Oil,

Class	Year Built	Wheelset	Tare	Loaded	Comments
OA	1953	8 Wheeled	13t 19c	32 t	5,000 Gallons (Altantic/Esso)
OB	1927	8 Wheeled	14t 13c	30/33 t	5,000 Gallons (Shell)
OC	1930	8 Wheeled	15t 9c	29/32 t	5,000 Gallons (COR/BP)
ODE	1958	8 Wheeled	13t 15c	40 t	3,000 Gallons (Copper Refineries)
ODY	1967	8 Wheeled	15t 1c	48t	4,000 Gals ACF & Shirleys
OEE					Phillips
OFY	1962	8 Wheeled	19.2t	25,000L	Bitumen (Emoleum)
OHE	1962	8 Wheeled	16.8t	40.6t	27,804 Lts (AMOCO)
OJY	1969	8 Wheeled	18t 18c	48 t	8,000 Gal (TOTAL )
OKE	1974	8 Wheeled	18.5t	40.6t	Roads Surface P/Ltd
OL	1956	8 Wheeled	13t 4c	32 t	5,000 Gallons (Ampol)
OMY	1975	8 Wheeled	16.9t	48.77t	Sulphuric Acid Mt Isa Mines
OP	1944	8 Wheeled	15t 18c	32t	4,800/5,000 Gal. (Purr-Pull/H.C. Sleigh Ltd)
OQ	1959	8 Wheeled	15t 3c	36 t	4,800 Gal. Bitumen Qld Oil Refineries/QAR Road Services
OR	1952	8 Wheeled	13t 15c	32 t	5,000 Gal. (QGR)
OS	1951	8 Wheeled	13t 17c	32t	C.S.R
OT	1929	8 Wheeled	15.2t	32.5 t	22,730 Lts (Caltex)
OV	1927	8 Wheeled	15t 2c	31/32 t	4,800/5,000 Gal. (Vacuum/Mobil 1962)
WE		8 Wheeled	17.0 t	22730 Lts	Bitumen
PCBY	1992	8 Wheeled	14.2		PCOY with 2 x 20' Container
FJO		4 Wheeled			Waste Oil x FJS



Caltex Siding Urangan



BP Siding Charleville



**Water:-**

Loading:- Station Yards

Unloading:- Loco water, Lineside water for Gangs and Isolated Railway Houses.

<b>Class</b>	<b>Year Built</b>	<b>Wheelset</b>	<b>Tare</b>	<b>Carry</b>	<b>Comments</b>
TW	1917	4 Wheeled	4t 5c	1370 Gal	
FFW	1917	4 Wheeled	7t 2c	2325 Gal	16'Frame 2'9½" Wheels
FW		4 Wheeled			Variuos types
FCW		4 Wheeled	5t 0c	1200 Gal	
SW		4 Wheeled			Variuos types
WFG		4 Wheeled	6t 2c		3x GI 5' dia Tanks
FGW	1917	4 Wheeled	7 t 7 c	2125 Gal	
SJW		8 Wheeled			
HW		8 Wheeled		2125 Gal	Various types
HJW		8 Wheeled	14t 0c	4650 Gal	
UW	1947/54	8 Wheeled	8t 8c	2125 Gal	
PW		8 Wheeled			Various types
WW	1953	8 Wheeled	15t 6c	3750 Gal	Passenger Train. Gross 32t
GWW		8 Wheeled			
WO	1978	8 Wheeled	17.2 t	45,500 L	Steel underframe, Stainless Tank
PCW	1983/4	8 Wheeled	13.5t	9,660 Lts	Tank x FGW/SGW on CMIS Frame
WSE	1986	8 Wheeled	14.5t	24,000 Lts	Conv WHE/
LTW		8 Wheeled		6000 Gal	Loco Tenders

**LTW (BB 18 ¼ Tenders) Coopers Plains as part of the poison gang.**

**Wheels:-**

Loading:- Workshops

Unloading:- Workshops

Traffic: New Wheels or Wheels for reprofiling on Workshop Lathes

Class	Year Built	Wheelset	Tare	Carry	Comments
HWH	1993	8 Wheeled	13.0t		Conv WHE
HSW		8 Wheeled			Conv HS
FJW	1970	4 Wheeled	5t 9 c		Some Auto / Transition Link
BSW	1981/87	8 Wheeled	14.0t	36.6t	Conv BLC
PW	1989/93	8 Wheeled	13.8t	26.2t	Conv WHE. Electric Loco bogies

**HSW Ipswich**

**Woodchip:-**

Loading:-

Unloading:- Port of Gladstone

Class	Year Built	Wheelset	Tare	Carry	Comments
VAOW	1992/3	8 Wheeled	14.9t	35.1 (dry)	Conv VAO

**VAOW Clapham before being sent to WA.****Gas:-**

Loading:- Pinkenba

Unloading:- Gas Works on the NCL

Class	Year Built	Wheelset	Tare	Carry	Comments
LPY	1965	8 Wheeled	26.2 t	42,570 L	LPGas Gross 48 t
LPO	1971	8 Wheeled	31t 11c	9,348 G 55,150 L	LPGas Gross 55t 15c Gross 63 t





LPO Pinkenba

**Block Train Definition;**

A train consisting entirely of similar classes of wagons of axle loads over 12.2t marshalled together for a certain class of traffic. The definition is also extended to cover trains in which 12 or more such wagons loaded to more than 12.2t gross per axle are included within a length of 315 metres or less of the train.

**Northgate to Caboolture**

80/20: A train may travel at a maximum speed of 80 km/h provided there are no more than 11 wagons with axle loads over 15.75t and up to 20t while the remaining wagons have axle loads up to and including 15.75t.

60/20: A train may travel at a maximum speed of 60 km/h if more than 11 wagons have axle loads over 15.75t and up to 20t.

Available for block trains subject to the above conditions.

**Acknowledgments:-**

The above table of rail vehicle was compiled from the following sources.

Weekly Notices

Train Notices

Circular Memos

QR Plan Books

Sunshine Express

QR Rollingstock Books 1982/1991

Wooden Wagons of Queensland Railways 1880 -1980 by John Armstrong

Iron and Steel Wagons of the Queensland Railways Steam Era by John Armstrong.

Modelling the Railways of Queensland 2010 Convention Clinic Notes