

TRAINS

In 1962 geologists identified the large, high-grade deposits of iron ore in the Hamersley Ranges in what later became known as Mt Tom Price.

In 1966 Hamersley Iron (HI) was formed. The first official iron ore train departed Tom Price on the 16th July 1966.

HI undertook development of the Mt Tom Price mine as the first mine in the Hamersley area. The first shipment of ore left for Japan in August 1966.

Originally Tom Price ore was railed only to Dampier Port. Ore from Tom Price is now railed to ports at Dampier and Cape Lambert. This rail system was the first standard gauge, heavy haul railways in Australia, and the first extensive privately owned and operated railways.

Rio Tinto has since expanded too many more mines and now comprises mainline systems of approximately 1600kms. With trains approximately 2.5km in length and consisting of 236 ore cars each carrying approximately 120t of ore per car, averaging out at approximately 28,000t per train load. The early railways were built under demanding physical and technical conditions and provided the basis for further developments over the past 50 years.



**First official iron ore train departing Tom Price
16th July 1966**

Rio Tinto Iron Ore

| Tom Price (Including Western Turner Syncline) | |
|---|--|
| Ore Type | Brockman Marra Mamba |
| Blend | Pilbara Blend |
| Commenced production | 1966 |
| Workforce | Residential/FIFO |
| Greater Paraburdoo (Paraburdoo, Channar & Eastern Range) | |
| Ore Type | Brockman |
| Blend | Pilbara Blend |
| Commenced production | Paraburdoo 1972, Channar 1990 & Eastern Range 2004 |
| Workforce | 78% residential, 22% FIFO |
| Marandoo & West Angelas | |
| Ore Type | Marra Mamba |
| Blend | Pilbara Blend |
| Commenced production | Marandoo 1994, West Angelas 2002 |
| Workforce | FIFO |
| Yandicoogina | |
| Ore Type | Channel Iron Deposit (Pisolite) |
| Blend | Yandicoogina fines |
| Commenced Production | 1998 |
| Workforce | FIFO |
| Hope Downs (north & south plants) | |
| Ore Type | Marra Mamba |
| Blend | Pilbara Blend |
| Commenced production | 2007 |
| Workforce | FIFO |
| Hope Downs 4 | |
| Ore Type | Brockman Ore |
| Blend | Pilbara Blend |
| Commenced production | 2013 |
| Workforce | FIFO |
| Brockman 2 / Nammuldi | |
| Ore Type | Brockman Marra Mamba |
| Blend | Pilbara Blend |
| Commenced Production | 1992 |
| Workforce | FIFO |
| Robe Valley Operations (Mesa A & Mesa J) | |
| Ore Type | Channel Iro Deposit (Pisolite) |
| Blend | Robe Valley |
| Commenced Production | Robe Valley 1972, Mesa A 2010, Mesa J 1992 |
| Workforce | 49% residential & 51% FIFO |
| Brockman 4 | |
| Ore Type | Brockman |
| Blend | Pilbara Blend |
| Commenced Production | 2010 |
| Workforce | FIFO |



RIO TINTO IRON ORE MINE TOM PRICE



MINE

TOUR

FACT

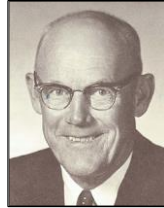
SHEET

Deposit Discovery

- ❖ Made on Mt Tom Price
 - ❖ October 1962
- ❖ Bill Burns & Ian Whitcher
 - ❖ Lease 13km x 8km
- ❖ Early exploration started in 1961

TOWN

- ❖ **Construction 1965** - The town is named after Thomas Moore Price Vice President of the US based steel company Kaiser Steel. He was instrumental in convincing the WA Gov to listen to Rio Tinto and realise the abundance of Iron Ore in the State.
- ❖ **Single Quarters** – Self-contained units for 140 single men, completed in 1975.
- ❖ **Drive-In**
- ❖ **Sporting Facilities** - Caters for **Thomas Moore** (Golf Club - oldest running golf club in the Pilbara celebrated 50 years 2016)
- ❖ **Shire** - Transition from closed town to Local Government starting in 1982. Shire of West Pilbara commenced 1972 which later changed to Shire of Ashburton in 1987. The shire includes the towns of Tom Price, Paraburdoo, Onslow & Pannawonica.
- ❖ **Housing** - Originally 250, now 1600
- ❖ **Population** - 5460 (2011 census)
- ❖ **School Age children** – 818
- ❖ **Altitude** - 747m above sea level & is the Highest town in WA (*dubbed Top Town in WA*)
- ❖ **Winter Temperature** - 0 to 28°C
- ❖ **Summer Temperature** - 30 to 50°C (*Average Summer Temp 35°C*)
- ❖ **Average Rainfall** - 402.2 mm



Thomas Moore

IRON ORE

- ❖ Hematite Fe₂O₃
- ❖ Waste – Below 50% Fe
- ❖ Low Grade – 50% to 60% Fe
- ❖ High Grade – Above 60% Fe
- ❖ Lump Ore – 6mm > 40mm Tom Price Ore approx. 66% Fe
- ❖ Fine Ore - <6mm Tom Price Ore 64% Fe



High Grade Iron Ore Tom Price

PRODUCTION TOM PRICE

(mt pa – Million tons per annum)

- ❖ 1966 – 5mt pa
- ❖ 1967 – 10mt pa
- ❖ 1988 – 20mt pa
- ❖ 2008 – 28mt pa

Total Production – All Mines

- ❖ 2006 – 166mt pa
- ❖ 2007 – 180mt pa
- ❖ 2010 – 220mt pa
- ❖ 2012 – 230mt pa
- ❖ 2013 – 290mt pa
- ❖ 2015 – 318mt pa



Trucks

KOMATSU DUMP TRUCKS

- ❖ Cost \$4.5m
- ❖ 240t carrying capacity
- ❖ 2500hp
- ❖ Fuel capacity 4542lts
- ❖ Diesel/Electric (AC Power)
- ❖ 26 Large 140t trucks &
- ❖ 10 smaller 100t trucks

Shovel/Diggers

HITACHI 3600 EXCAVATOR

- ❖ Cost: \$7m
- ❖ Engine: Cummins QSKTA60-CE 1944 hp
- ❖ Fuel Capacity – 7450 lt
- ❖ Hydraulic Oil Capacity – 4000 li
- ❖ Bucket Weight – 28,500 kg
- ❖ Bucket Capacity – 21.0 m³
- ❖ Height at full reach -16.5 metres

Shovel

(Decommissioned - Viewed on Mine Tour)

6 – 0 & K RH200

Commissioned in 1994 - Decommissioned 2010

Worked 72,555 hours

❖ Weight 480t

- ❖ Engines – Twin KTA 38 Cummins 1200 hp
 - ❖ Fuel Capacity – 10200 lt
- ❖ Fuel Consumption – 8000 lt per 24 hr
 - ❖ Bucket Capacity – 17.5 m³
 - ❖ Bucket Weight – 35,000 kg
- ❖ Height at full reach – 16 metres
- ❖ Hydraulic Oil Capacity – 7,500 lt