

AVAILABLE FOR LEASING

## 1. DIAL RANGE

Situation:

Southern slopes of Dial Range and 6 miles to the south of Penguin on north-west coast.

Facilities For Land Transport:

A metalled road from Penguin passes within one mile of the deposits. From Penguin the Government railway line and road connects with the port of Burnie, a distance of ten miles.

Nearest Port for Shipment:

Burnie.

Extent of Deposits:

One or more parallel lodes of red hematite occur over a maximum width of 200 feet and length of 60 chains.

The actual extent and depth of the deposit has not been proved and ore reserves cannot be calculated in its present undeveloped state.

Assays by Government Assayer

	<u>Moisture:</u> <u>at 110°C</u>	<u>Iron:</u>	<u>Silica:</u>	<u>Phosphorous:</u>	<u>Sulphur:</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
1.		68	0.5	traces	traces
2.		66	1.6	traces	traces
3.		69	0.8	traces	0.15
4.		58	6.8	traces	ttraces
5.	0.15	50.86	23.40	0.05	0.095
6.	0.02	63.84	8.60	0.08	0.03
7.	0.12	54.50	19.20	0.001	0.085
8.	0.21	42.56	30.90	0.032	0.10

## 2. PENGUIN

Situation:

Along the course of Penguin Creek about three miles south of Penguin

Facilities for Land Transport:

Road and train - 3 and a half miles to Penguin.  
Railway and road from Penguin to Burnie - 10 miles.

Nearest Port for Shipment:

Burnie.

Extent of Deposits:

These consist of red hematite in association with and replacement of conglomerates, sandstones and slates along a length of 1 1/4 miles and have a strike of 30°. Quantities have not been proved but appear to be limited.

Assays By Government Assayer:

	<u>Moisture</u> at 110°C	<u>Iron</u>	<u>Silica</u>	<u>Phosphorous</u>	<u>Sulphur</u>
	%	%	%	%	%
1.		69.00	0.4	trace	trace
2.		68.00	0.6	trace	trace
3.		68.50	0.6	trace	trace
4.	0.13	67.71	2.20	0.026	0.025
5.	0.18	65.24	1.90	0.03	0.098

## 3. LONG PLAINS

Situation, Transport and Shipment:

The area lies midway between Waratah, which is connected by rail with the seaport of Burnie and the port (unused at present) of Corinna on the Pieman River - 11 miles from the mouth.

The present access is from Burnie by rail or road to Waratah, a distance of 48 miles, thence by road for 21 miles and by pack track for 5 miles. The more natural outlet for the district is through Corinna (connected by road with Waratah - 41 miles). A 25 mile railway from Corinna would tap the deposits.

Extent of Deposits:

These consist of numerous large and disconnected bodies of magnetite along a tract of country 25 miles long and half a mile wide. This tract has a general north and south trend and is occupied by altered basic igneous rocks. Some hematite is associated with the magnetite and at places small amounts of pyrite, pyrrhotite and chalcoppyrite are also present. The largest lens is 2000 feet long and 100 feet wide and it has been estimated that the field contains 22,000,000 tons of ore (potential reserves).

Assays by Government Assayer:PARADISE - ROCKY RIVER AREA

	<u>Ferrous</u> <u>Oxide</u>	<u>Ferris</u> <u>Oxide</u>	<u>Silica</u>	<u>Alumina</u>	<u>Phosphoric</u> <u>Acid</u>	<u>Iron</u> <u>Sulphide</u>
1.	13.58	78.66	2.40	3.31	trace	0.068
2.	22.57	64.47	8.80	3.18	trace	0.054
3.	10.32	87.52	1.00	2.54	trace	0.027
4.	7.20	70.21	21.08	1.78	trace	0.12
5.	16.20	53.85	22.24	5.22	0.03	3.33
6.	17.22	71.75	2.68	6.04	trace	0.91
7.	10.28	54.34	29.36	4.74	trace	2.58

## RIO TINTO AREA

The average of 17 samples indicates the composition of the ore:-

Iron .....	67.23 %	
Manganese Dioxide .....	2.37 %	(present in 1 sample only)
Titanic Oxide .....	Trace	in one sample
Silica .....	.91 %	(highest 2.4 %)
Alumina .....	.11 %	(average for 6 samples)
Phosphoric Acid .....	.075%	(highest 0.38 %)
Sulphur .....	.045%	(average in first 9 samples No. 10 had 3.66 % and absent in remaining 7 samples.)

In the Rio Tinto area 5 acres are held under lease by Australian Iron and Steel Limited; otherwise no mining rights are held.

## 4. BEACONSFIELD

Situation:

At Mt. Vulcan, Mount Scott and Barnes Hill - 3 miles west of Beaconsfield (River Tamar near north coast).

Facilities for Land Transport:

Disused tram line, 6 miles in length connects the deposits with Port Lempriere on River Tamar.

Nearest Port for Shipment:

Port Lempriere. Beauty Point - 3 miles north of Beaconsfield is the nearest operating port.

Extent of Deposits:

As far as the quantity of ore was revealed by a Government Boring campaign in 1930 the following details have application:-

- Mt. Vulcan: Thirteen (13) bore holes proved an average depth of 32 feet of ore over an area of approximately 50 acres.
- Mt. Scott: Only two bore-holes were put down, so no reliable estimate of average depth and area of the deposit can be made.
- Barnes Hill: Six scout bores proved the presence of an average depth of 47 feet of ore over approximately 20 acres. The total area is, however, greater than this figure. The deposit consists of hill detritus consisting of ochreous and hard types of iron ore. The ochreous portion consists of hematite and possibly some limonite. The harder portion may be hematite or magnetite. The magnetite is derived from the veins of the latter which exist in the serpentine bedrock. The hematite has been derived from the oxides of iron formed during the weathering and disintegration of the serpentine.

Assays by Government Assayer:Average Assay of Material from each Area as Represented  
by Bore Cuttings

	<u>Mt. Vulcan</u>	<u>Mt. Scott</u>	<u>Barnes Hill</u>
Thickness in feet of iron ore assayed	458.5	110	298
SiO <sub>2</sub>	12.28 %	17.72 %	14.17 %
Fe <sub>2</sub> O <sub>3</sub>	59.10 %	51.50 %	51.74 %
FeO	2.20 %	2.93 %	2.31 %
Cr <sub>2</sub> O <sub>3</sub>	5.18 %	5.63 %	7.80 %
Al <sub>2</sub> O <sub>3</sub>	10.11 %	13.39 %	11.39 %
MgO	0.85 %	0.53 %	0.95 %
TiO <sub>2</sub>	0.14 %	0.04 %	0.42 %
P <sub>2</sub> O <sub>5</sub>	0.0006%	trace	0.02 %
S	0.07 %	0.12 %	0.12 %
NiO	0.10 %	0.02 %	0.07 %
M <sub>n</sub> O and M <sub>n</sub> O <sub>2</sub>	0.47 %	0.07 %	0.16 %
H <sub>2</sub> O etc.	9.07 %	7.89 %	9.75 %
Chromium	3.522 %	3.838 %	5.304 %
Metallic Iron	43.086 %	38.335 %	38.021 %

General:

An area of 10 acres is held under lease at Mt. Vulcan, otherwise Mining Rights are available.

## 5. LEASED AREAS

Iron ore deposits also occur at Blythe River, Zeehan and Hampshire but in each case these are now leased for mining.

Further details of deposits are contained in Mineral Resources No. 6, The Iron Ore Deposits of Tasmania.

ACTING GOVERNMENT GEOLOGIST

Mines Department,  
Hobart.

22nd March, 1937