

1948/58
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COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES
GEOLOGY AND GEOPHYSICS

RECORDS

1948/58

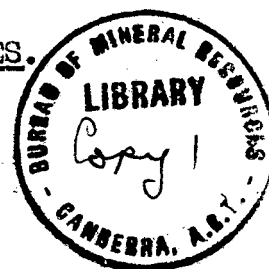
ANALYSES OF SOME AUSTRALIAN IRON ORES

By

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ANALYSES OF SOME AUSTRALIAN IRON ORES.

Report No. 1948/58.
(Geol. Ser. No. 22).



QUEENSLAND. NON-LENDING COPY

1. Portland Roads.

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Lenses of micaceous haematite assaying (1937) 47-66% iron.
 Silica content 24-6.2%.

2. Mount Lucy, Almaden.

Ironstone used for flux. 67% iron, high in silica.

3. Iron Island, Rockhampton.

Cryptocrystalline magnetite, with massive haematite.

Analyses (1904)

	<u>Surface sample</u> <u>per cent</u>	<u>Specimen</u> <u>per cent.</u>
Water	0.13	0.46
Silica	2.51	1.73
Alumina	2.95	2.71
Iron	64.72	63.94
Manganese	-	-
Lime	2.85	5.53
Magnesia	1.07	trace
Phosphorus	0.065	trace
Titania	-	-

4. Stanage Point, St. Lawrence.

Black pulverulent magnetite.

Iron 67%
 Phosphorus nil.

5. Olsen's Caves, Fitzroy.

Massive haematite and magnetite.

Assay (1904)

Iron 67%
 Phosphorus trace

6. Kabra.

Massive magnetite.

Analysis (1904).

Water	0.17%
Silica	2.85
Alumina	1.43
Iron	66.00
Manganese	-
Lime	6.61
Magnesia	trace
Phosphorus	trace
Titania	nil.

QUEENSLAND (Cont.).

7. Mount Morgan.

Magnetite and haematite.

Analysis (1904)

	<u>North end</u>	<u>South end</u>
Water	0.46%	0.30
Silica	4.00	2.30
Alumina	2.02	1.55
Lime	9.20	2.80
Magnesia	6.14	0.85
Phosphorus	trace	0.08
Iron	55.80	62.40

8. Alma Creek.

Titaniferous haematite and magnetite.

Analysis (1904)

Water	0.56%
Silica	10.40
Alumina	1.70
Iron	56.27
Manganese	-
Lime	2.85
Magnesia	not detd.
Phosphorus	0.025
Titania	present

9. Biggenden.

Magnetite. No analysis.

(Being worked at present).

10. Woodstock.

Massive magnetite.

Analysis (1904).

Metallic iron	66.1%
Silica	2.7
Alumina	0.7
Lime and magnesia	nil
Moisture	0.9
Loss on ignition	1.9
Titanic oxide	nil
Phosphorus	0.08
Sulphur	0.01
Arsenic, copper and lead	nil
Gold	trace
Silver	2 dwt. per ton

11. Cloncurry District.

No analysis.

NEW SOUTH WALES.

1. Deposits being worked at present by or for Australian Iron and Steel Limited.

(a) Michelago.

Haematite 50- 65% iron.

(b) Broula.

50.74% Fe.

- (c) Crookwell.
- (d) Goulburn (Marulan).
- (e) Gulgong.

Magnetite - very refractory.

- (f) Orange (Cadia).

Low grade ore, sulphurous at depth.

2. Fine Flower.

Magnetite.

Fe ₂ O ₃	74.44 ⁺
FeO	20.03 ⁺
SiO ₂	3.40
TiO ₂	absent
P ₂ O ₅	0.006
SO ₃	absent
Copper	0.02

⁺ Equal to 67.62% of metallic iron.

The lease of this deposit is held by C.G. Cumberland and H.W. Gibbons, whose last address we have was Fine Flower Ironstone Co., A.M.P. Building, Prince Street, Grafton, N.S.W.

3. Taralga.

Haematite.

Iron as metal	68.50%
FeO	12.90
MnO	0.17
Phosphorus	0.03
Silica	1.30
Water	nil
Al ₂ O ₃	1.60
Calculation as Fe ₂ O ₃	97.867.

4. Tabulam.

Iron	45 - 48%
Silica	23 - 26%
Phosphorus	0.06%

5. Minor localities.

Micaceous haematite.

- (a) 6 miles north-east of Binalong⁺

Ferric oxide 97%.

- (b) 7 miles east of Galong.

Micaceous haematite 93%.

Illalong Creek. 15 miles west-north-west of Yass.

Prepared for use as "Speculite" paint in 1919.

- (c) Breadalbane, Fitzroy, Jerrawa, Tirrana Redgrounds, recently produced, no information.
- (d) Production of iron oxide for gas works from Moss Vale, Port Macquarie and Mittagong districts.

VICTORIA.

1. Nowa Nowa.

Haematite.

Iron	33.4	-	63.6
SiO ₂	53.30	-	6.43
Phosphorus	slight trace	-	0.07
Sulphur	0.10	-	0.14

2. Langwarrin.

Limonite 48.6% - 47.6% Fe.

3. Mirboo North.

Limonite.

SiO ₂	2.75
Fe ₂ O ₃	77.14
FeO	1.80

4. Lal Lal.

Limonite.

TASMANIA.

1. Anderson's Creek.

Limonite, haematite and magnetite.

Fe ₂ O ₃	51.5%	-	59.1%
FeO	2.2%	-	2.9%
SiO	12.28	-	14.17%

2. Blyte River.

Haematite.

Iron	63%	}	from better grade ore.
Silica	7%		

3. Long Plains.

Magnetite

Iron 63 - 69%.

4. Zeehan.

Magnetite.

Iron 60 - 70%

Some lenses sulphurous and siliceous.

SOUTH AUSTRALIA.

1. Middleback Ranges (worked by Broken Hill Pty. Ltd.)

2. Mount Bessemer.

Micaceous haematite.

Iron	45.93%	-	61.17%
Silica	9.04%	-	37.1 %

WESTERN AUSTRALIA.

1. Yampi Sound.

Haematite.

	<u>Analysis</u>	
	1.	2.
Iron	66.48%	64.91%.
Silica	4.16	7.03
Sulphur	0.072	0.041
Phosphorus	0.064	0.012

2. Koolyanobbing.

Micaceous haematite.

Fe ₂ O ₃	98.75%
Equal to Fe	69.73
SiO ₂	1.04
Phosphorus	0.016
Sulphur	trace
Ignition loss	0.39

3. Wilgie Mia.

Haematite.

Iron	64.36%	68.83%
Silica	2.48%	1%

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Geologist.