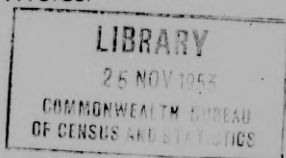


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COMMONWEALTH OF AUSTRALIA.

DEPARTMENT OF NATIONAL DEVELOPMENT.

BUREAU OF MINERAL RESOURCES, GEOLOGY
AND GEOPHYSICS.



THE
AUSTRALIAN MINERAL INDUSTRY

QUARTERLY REVIEW.

VOL 6. No. 2

ISSUED UNDER THE AUTHORITY OF SENATOR THE HON. W. H. SPOONER,
MINISTER FOR NATIONAL DEVELOPMENT.
NOVEMBER, 1953

PRICE 3/-.

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SECRETARY — H. G. RAGGATT.

DIRECTOR — P. B. NYE.
DEPUTY DIRECTOR — J. M. RAYNER

CHIEF MINERAL ECONOMIST — J. A. DUNN.

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Statistics of Production, Imports and Exports in this Quarterly Review are provisional only. They are revised in later publications of the Bureau of Mineral Resources or the Commonwealth Bureau of Census and Statistics.

Statistics referring to the mineral industry in Australia as a whole are compiled jointly by the Bureau of Mineral Resources and the Commonwealth Bureau of Census and Statistics from production data received from State Mines Departments, and from overseas trade statistics furnished by the Bureau of Census and Statistics but subject to check by the Bureau of Mineral Resources.

Data referring to production of refined metals and to prices are received direct from industries concerned. To all who have contributed information for this quarterly publication the Bureau extends its thanks.

Import data shown are imports cleared for home consumption. The value of imports quoted represents the f.o.b. value converted to Australian currency at the current rate of exchange on day of export of goods.

The value of exports includes the cost of containers and is the f.o.b. value.

All tonnages are in long tons (2,240 lbs.) unless otherwise stated.

All values are in terms of Australian currency unless otherwise stated.

The following abbreviations are used throughout:—

Estimated	e	Queensland	Q'land
Incomplete	i	New South Wales	N.S.W.
Data not yet received	blank space	Aust. Capital Territory	A.C.T.
Not available	n.a.	Victoria	Vic.
Not recorded	n.r.	Tasmania	Tas.
Not elsewhere included	n.e.i.	South Australia	S.A.
None	—	Western Australia	W.A.
Less than unity	†	Northern Territory	N.T.
Smelter production	s.p.	Commonwealth Bureau of Censuses & Statistics	C.B.C.S.
Concentrates	Cons.	Royal Mint	R.M.
Amended from previous issue *		Aust. Mines & Metals Assoc. (Inc.)	A.M.M.

AUSTRALIAN MINERAL INDUSTRY

QUARTERLY REVIEW

NOVEMBER, 1953.

THE LEVEL OF BASE METAL PRICES

The London Metal Exchange has now resumed dealings in the four principal base metals — lead, zinc, copper and tin. Before the war, the Exchange quotations for these metals varied quite widely, but there was a general level of trend for each — a price plateau with hills and valleys of price fluctuations. From mid-1950 and until recent months the disturbing effects of the Korean war lifted prices to what were obviously great peaks, towering over some new plateau to which world-wide inflation has lifted the general level of trend of each metal.

International events will largely determine the degree of future inflation. However, we may hope that we have before us a prolonged period of open market dealing in the metals. To mining engineers and to others, who have to assess the possibilities of developing new ore-bodies, or the future of their economic interests in the metal industry, the anticipation of prices is all-important. Can we deduce the general levels of the new plateaus to which, under normal trading and present general inflation, the prices of these base metals should conform?

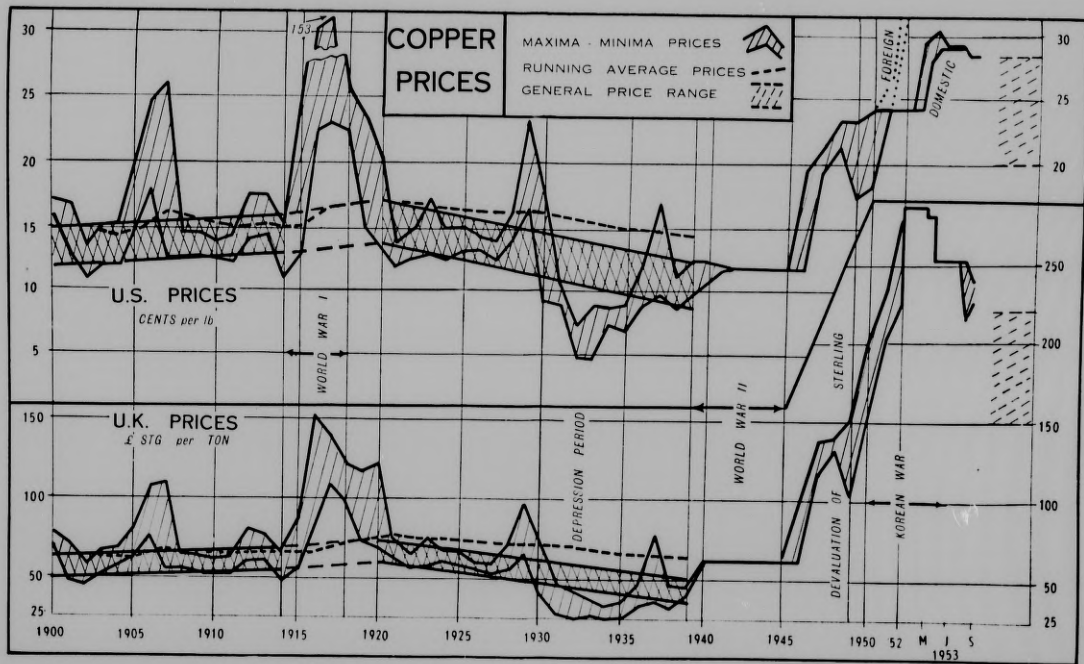
It must be acknowledged that all kinds of disturbing influences may greatly qualify any estimate of future price levels. Whoever makes such an estimate is taking an almost certain risk of criticism at any point of time of being wrong, for it is the habit of many to remember the estimate and forget the qualifications. However, this note is written for those of some understanding.

Past price history provides the basis for our assessment of the future. The four accompanying graphs illustrate the variations of prices of copper, lead, zinc and tin on the London Metal Exchange and in the United States since 1900. The graphs illustrate the annual maxima and minima for each metal; official controlled prices are shown for the years of controls. On each graph the running average price commencing from 1900 is shown (it has no significance after the commencement of World War II); its sole purpose is to serve as a guide in determining the trend, having in mind that the running average lags considerably behind any change in trend.

On each graph, a broad band, illustrating the trend and general price range*, cut through the troughs and peaks of the maxima-minima prices. The lower limit of the band represents the price below which, except for abnormal circumstances or occasional market bids in slack periods, prices do not fall and below which only a few low cost mines can continue profitably in operation. The position of this lower limit over a period of time leaves little scope for variation in opinion, particularly if determined in conjunction with an appreciation of the circumstances of the times. The upper limit may be susceptible to a somewhat wider difference of opinion; for our purpose, price peaks are ignored, particularly in those periods of shortage when prices may soar far above the general level. The width of the band represents approximately the general range of prices in average trading through the years.

The following broad features are typical of these four metals: Prices were reasonably stable in the early years of the century, before World War I, with

*The index as shown on each graph is incorrect. The shading against "General Price Range" in the index refers to the projected future general price range. Between 1900 and 1940, the General Price Range on the graphs is represented by full line criss-cross hatching.



a general overall slight upward trend. War demand sent prices to abnormal heights, followed by a brief collapse in the early 1920's, but to a general level rather above that of pre-war in keeping with the slight degree of inflation at that time. Improved demand maintained prices at a high or reasonable level to 1929, but the subsequent depression carried prices down to record nadirs below the floor of the general price range. Then, in the mid-1930's, ensued the climb from the depression — earlier in the case of tin — to the more reasonable prices just preceding the commencement of World War II. In the interval between the two wars, discounting the abnormal sagging effect of the depression period on the general trend, there was a downward tendency of copper, lead and zinc prices, this tendency was flattening off just before World War II and perhaps turning upwards in some cases, but to introduce flexures in this trend band would be an unreal refinement. Between the two wars the general level of tin prices continued slightly upwards but prices fluctuated widely.

During World War II, prices were fixed at reasonably high levels in order to encourage production. When the war terminated, world-wide inflation began to lift prices to a higher level, but superimposed on this, from mid-1950 to recent months, were the effects of shortages introduced by the Korean War, under which prices of lead, zinc and tin reached fantastic levels; official prices of copper, though high, were reasonable. Now, reminiscent of the pattern after World War I, prices are returning to the new levels which inflation of recent years requires.

The object of this note is to estimate the future level of the general price range of each of the four principal base metals.

Of the many factors which influence price, some are fundamental in determining the general level and trend of prices, others have only a transitory effect and introduce year to year fluctuations. Some of the factors may be briefly mentioned.

Through the years, short term influences on price include seasonal changes in consumption, stocks (in hands of the consumer, producer, and Exchange), strikes or breakdowns at mines, smelters, consumer plants or along the line of supply, and weather conditions in important producing areas; even the momentary financial position of a dealer may introduce an abnormal price. Factors which have varying terms of influence include currency controls, changes in rates of exchange, national and international political decisions, agreements between powerful groups of producers or producer countries, or between producer and consumer countries, tariff levels of dominating consumer countries, taxes on production or exports in dominating producing countries, changes in use of metals, and world-wide economic cycles.

The fundamental broad basis of price, around which all the above factors give rise to peaks and troughs, is, however, the cost of production. The trend of cost determines the trend of price over the years. Thus the mining of the great low-grade copper deposits in U.S.A., the most important consumer country, and the scope they permitted for increased efficiency was a dominant factor in setting the copper price level and its downward trend between the two wars. The extent to which copper costs were reduced is reflected in the position of the curve of running average price; for copper in the 1930's this is well above the ceiling of the general price range band, whilst for lead and zinc it remains within the limits of their price range.

In considering cost of production as the underlying factor in price levels and trends we are, of course, dealing with a great number of producers each of whom has a different cost level, some low-cost, some medium-cost, others

LEAD PRICES

MAXIMA - MINIMA ANNUAL PRICES

RUNNING AVERAGE PRICES

GENERAL PRICE RANGE

PEAK 21.5 CENTS

19 CENTS

U.S. PRICES

CENTS per lb

11
10
9
8
7
6
5
4
3
2
190
80
70
60
50
40
30
20
10

U.K. PRICES

£ STG per TON

1900

1905

1910

1915

1920

1925

1930

1935

1940

1945

1950

52

M

J

S

1953

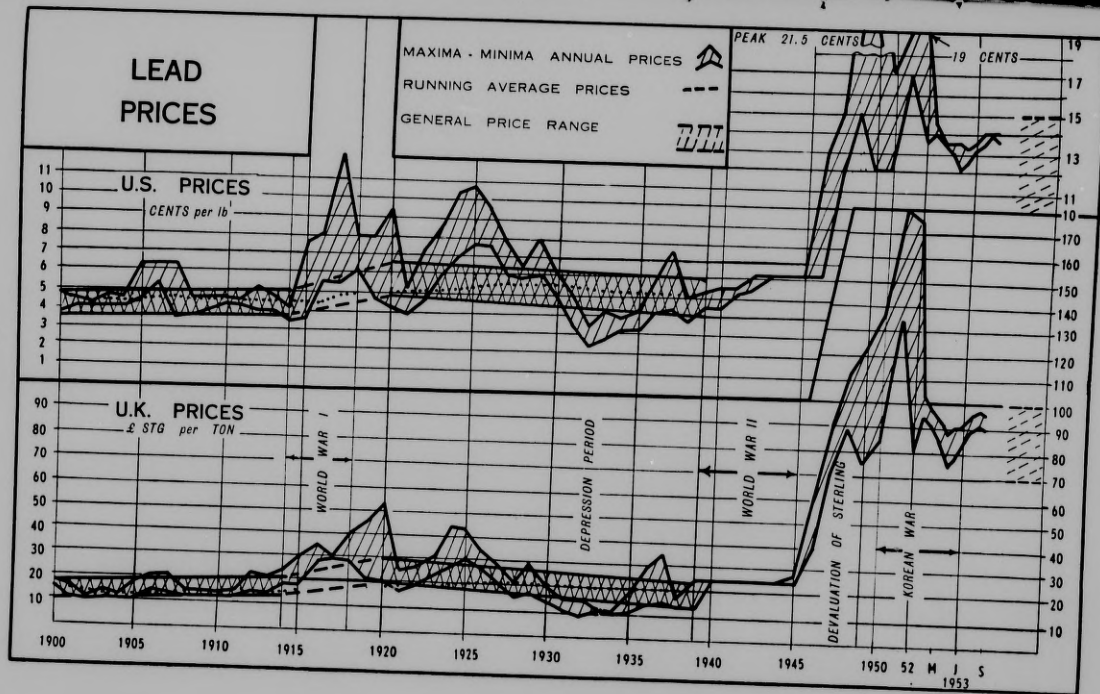
WORLD WAR I

DEPRESSION PERIOD

WORLD WAR II

DEVALUATION OF STERLING

KOREAN WAR



high-cost and marginal. By-products of some ore-bodies permit credits which considerably decrease costs of the main metal; credits from the high gold content of Noranda ore (Quebec) before the war reduced costs of copper production there to 4.35 cents a lb. The high grade copper ores of Northern Rhodesia yield metal at costs far below those of most American mines. In the lead-zinc field, the grade at Broken Hill is the highest of any comparably important producer, although wage bonuses and royalties reduce the advantage. It is an over-simplification to say that those producers whose cost levels permit them to satisfy demand at any time determine the general minimum level of price — mining is rather more resilient than that, in grade, efficiency, and financial ability to carry on for a period despite uneconomic prices. However, cutting off the extreme peaks (such as those of the mid-1920's) and the extreme troughs (such as in the 1930's depression period when many mines closed down for some years), there is a general level of demand for each metal, and it is the cost of production of those mines which provide the backbone of supply of the particular metal which underlies the broad range of price and its trend over a period of years.

In open marketing the producers' cost influence on price is indirect and passive. During a period of low demand, although producers are anxious to sell output and compete for buyers, it is the latter, by taking advantage of that competition, who determine the price. With falling demand the price may become so low that weaker producers are pressed out of operation. As demand increases, bidding amongst consumers for available supplies determines the level to which prices may be lifted. Thus, even at the lower margin of profit, in the above sense it is the consumer who finally determines the financial welfare of the producer.

We may liken the general price range between two points of time to a rubber band, stretched up and down by the various short term factors which affect the price. Costs of production of a broad group of mines govern the general level and width of the band, the daily quotations on the commodity markets determined the fluctuations either side of the band.

World inflation has carried costs to new levels, and not uniformly in different countries. Sharp changes in exchange rates have also considerably altered the significance of costs as between various countries, particularly since 1949, although over the years such differences tend to fade. In the maze of factors, the influence of the dominant consumer today, the United States, must be considered.

Relative to world production and consumption, the United States position is as follows: lead production, 20%, consumption, 30%; zinc production, 30%, consumption, 40%; copper production, 30%, consumption, 50%. U.S. consumption in these metals is far greater than pre-war whilst the domestic supply position is relatively less to the extent that from being an exporter she is now a heavy importer of these metals. U.S. must maintain her production in these metals, and will presumably continue to do so by means of tariff protection.

Were there no U.S. tariff protection, and prices freely competitive, the U.S. production of these metals forms so large and vital a proportion of the world supply that the cost of U.S. production would be a dominant factor in governing the levels of the general price range. In consequence of U.S. tariff protection it might be contended that prices for the rest of the world's production are governed by factors outside of the U.S. But some 10% of the rest of the world's lead, 10% of zinc, and 20% of copper find a market in the U.S. These are very important quantities and have a definite influence on world prices, notwithstanding that 80-90% of the rest of the world's production must find

ZINC PRICES

MAXIMA - MINIMA PRICES
 RUNNING AVERAGE PRICES
 GENERAL PRICE RANGE



U.S. PRICES

CENTS per lb

13
12
11
10
9
8
7
6
5
4
3

PEAK 20.33

18
17
16
15
14
13
12
11

U.K. PRICES

£ STG per TON

110
100
90
80
70
60
50
40
30
20
10

PEAK £ 190

160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10

1900

1905

1910

1915

1920

1925

1930

1935

1940

1945

1950

52

M

J

S

1953

WORLD WAR I

DEPRESSION PERIOD

WORLD WAR II

DEVALUATION OF STERLING

KOREAN WAR

markets outside of the U.S. A further rather hidden influence is the effect which the manufactured products of these metals exported from U.S. in competition with other countries have on world prices. The U.S. tariff steps down the price of these metals elsewhere relative to U.S. Factors such as supply and demand outside of U.S. do affect prices on the London Metal Exchange at any time, tending to lead to somewhat lower prices still, except in period of shortage. By and large, the general level of U.S. prices as governed by the level of U.S. costs of production will be the underlying influence on the new level of world prices of each of these metals, but superimposed on this level will be the day to day fluctuations in markets outside the U.S. — fluctuations which will be reflected back to the U.S.

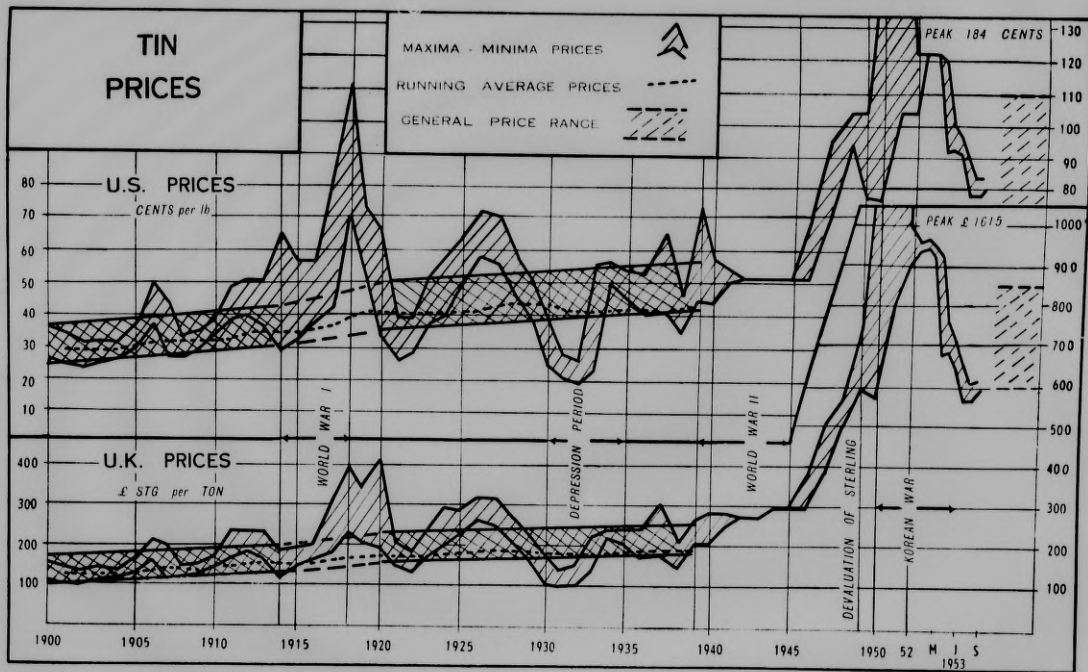
It is of interest to comment here on a recent proposal to impose a sliding scale tariff on imports of lead and zinc into the U.S. Such a tariff has as its object the maintenance of a floor price in the U.S., in order to free domestic producers from the competitive effect of overseas prices. The effect would be to shift the pressure entirely on to producers outside the U.S., leading to a further and continuous depression of prices in other countries.

Accepting the underlying influence of U.S. production costs on the level of the general price range of copper, lead and zinc, the relation of the new to the pre-war level may be expected to be in proportion to increased costs. Two items are all-important in determining cost levels: wages and efficiency. The wage factor goes beyond the wages paid out by a particular metal producer, and includes the wage content of the capital and consumer goods required in production. Higher hourly wages may be compensated to varying degrees by increased efficiency — in general it is the relation between these two which determines the upward or downward cost trend. A relatively high wage rate may not mean a relatively high cost — we have the example today in U.S. of high hourly wages relative to other countries, although for the majority of commodities actual costs are not commensurately high.

In general U.S. wages are approximately 2.6 times higher than pre-war. For copper, the strong effect of increased efficiency in reducing costs before the war has continued (in illustration, although the U.S. general price range of copper just before the war was 9-12.5 cents, U.S. producers were in quite a profitable position at 18.5 cents a lb. early in 1950); the over-all increase in costs in U.S.A. today would be of the order of 2.2 times pre-war. For lead and zinc, there have been considerable changes in ore reserves, particularly in U.S.A., and the ratio of zinc to lead is higher in several new ore-bodies; the over-all grade of ore mined is lower than pre-war and has minimised the effect on cost of increased technical efficiency. General increases in costs of lead and zinc in U.S.A. will be rather higher than in the case of copper and up to 2.5 times pre-war. We may expect the level of the general price range of these metals in the U.S. to be correspondingly higher than pre-war. The level of the U.K. range will follow according to the exchange rate, with tariff and freight adjustments.

It may be remarked that in Canada, where production of these three metals is also considerable, costs have tended to increase to an extent similar to that in the U.S.A. Canadian production costs would, on the whole, support the U.S. influence on the price of lead, zinc and copper.

For tin, there is no element of U.S. cost in production (except cost of smelting at the Texas plant), and the conclusions concerning copper, lead, zinc, are not applicable. The operating costs of a number of Eastern producers today have increased an average of 3.4 times those of pre-war, the range being from 2.2 to 5.0. Capital costs of new dredges have risen to more than 3



times pre-war, and to producers who have purchased new dredges amortisation represents a very considerable addition to costs. Costs of exploration have considerably increased, and generally new ground has a lower tin content than earlier leases. In Africa and Bolivia, costs have risen to an even greater extent. In dredging there is little opportunity for any great increase in efficiency, and as a rule there is only limited scope for variation of grade worked on existing properties. Summarising the relative position as a whole today as compared with pre-war, it is reasonable to admit of a rise in overall costs of at least 3.2 times. Before the war, the level of tin prices was governed partly by an International Tin Agreement. In the absence of such an agreement in the future the new price level could be well below the proportionate increase of costs of the dominant producers. The actual level is likely to be determined by the proposed new International Tin Agreement.

The above are the broad factors on which may be based an anticipation of the future price levels. The specific figures in the following remarks are not to be confused with any short term price ranges; they are the limits between which prices may be expected to range, breaking through the floor in an abnormal recession, or through the ceiling during heavy demand.

Copper. Except for a brief period towards the end of the 1920's the price of copper showed a clear downward tendency between the two World Wars. During this period the great low grade deposits of America reached a high stage of development and from the early 1930's the Northern Rhodesian deposits began to add materially to production. The slide to the depression nadir in the U.S. was more abrupt and more severe than for any other base metal. Except for the depression period the U.S. domestic price was, in general $1\frac{1}{2}$ to 2 cents above the U.K. price.

Today, the movement of a large proportion of world copper is towards the U.S. Although the U.S. tariff on copper is at present suspended, it will be brought into force at any time to maintain local production. U.S. costs of copper production will be the underlying factor in the general price range, despite the far lower cost of Northern Rhodesian copper.

The pre-war U.S. general price range was about 9-12.5 cents per lb., the U.K. range being about £stg.35-50 a ton. The U.S. range today, in keeping with increase of costs, would be about 20-28 cents a lb., the comparable U.K. range being £stg.150 to £stg.220 per ton — when the U.S. tariff is introduced, the U.K. range could be commensurately lower. Present prices are somewhat above these ceilings.

Recent alteration of the exchange rate of the Chilean peso may change the high-price copper policy of the Chilean Government. However, if, as before the war, a producers' arrangement were made on output of copper from Chile, Africa, and also Canada, the U.K. price could tend towards the upper part of the range.

Lead. Between the two World Wars, the general price trend of lead was downwards, with a considerable sag in the depression period — recovery from the depression commenced in 1935. In general, allowing for variation of exchange rates, the U.K. minimum price of lead was 1-1.75 cents less than the U.S. price. Before the war, the general price range was about 4-6 cents in the U.S. and about £13-£23 in U.K.

On present costs, it would not be unreasonable to expect an increase in the U.S. general price range to 10-15 cents per lb. Since the war U.S. has become a considerable importer of lead. Transatlantic freights besides U.S. tariff have to be taken into consideration. Assuming no change in tariffs, the

equivalent U.K. general price range should be approximately £70-£100 per long ton. As 90% of production other than that of U.S. must find a market outside of that country, the day-to-day market pressure will be on costs in extra-U.S. countries. Thus the average U.K. price will usually tend towards the lower part of the range.

Zinc. The price history of zinc is little different from that of lead; fluctuations in periods of strong demand tend to be more pronounced. In the 1930's the floor price and the annual average price generally tended to be just above lead. Allowing for variation in exchange rates, between the two wars the U.K. minimum price was 1-2 cents below the U.S. price; towards the end of the 1930's it was generally 1½-2 cents lower. The U.S. general price range just before the war was about 4.5-6.5 cents, the U.K. range being £14-£24.

The pre-war costs of zinc production marched with those of lead. Particularly in U.S., an increasing amount of ore is being mined in which zinc greatly dominates over lead, and the relative cost picture is changing. For the present it is reasonable to expect a general price range similar to lead, 10 to 15 cents a lb. in the U.S., with an equivalent U.K. range about £70-£100 a ton, assuming no change in U.S. tariff. A change in U.S. tariff could alter the picture.

Some recent prices of zinc have been below the above U.K. floor. Unlike lead, zinc was subject to international allocation during the recent period of controls, and as always in such circumstances the stock position became abnormal. Some time may elapse before zinc recovers. Apart from emergency periods, zinc supply capacity will now be relatively greater than for lead. Zinc is more susceptible than lead to replacement for some purposes by aluminium and certain alloys. It will not be surprising if, in the long term, zinc maintains a somewhat lower price level than lead, in contrast to their pre-war relative positions.

Tin. After World War I tin prices fluctuated more widely than before 1914, and were at a rather higher level. Between the two wars the general price range showed a slight upward trend. The International Tin Agreement which came into force in the 1930's helped to shorten the effects of the depression on the tin industry and by 1933 the level of the general price range was well maintained. It has been said by some critics of the Tin Agreement of the 1930's that its main object was to maintain prices at or near boom levels. A glance at the graph of tin prices will at once dispel this fallacy — recognising the general price trend, prices of tin in the 1930's were reasonable and far below boom levels. U.S. prices tended to be about 2½-3 cents above the equivalent U.K. prices. Before the war the limits of the general price range were about £190 and £260 in the U.K. and 42 and 57 cents in the U.S.

Today, the corresponding limits of the general price range would be at least £600 and £850 in the U.K. and 75 and 110 cents in the U.S. — these estimates are almost certainly on the low side. In the absence of an international tin agreement, in view of the considerable over-production capacity, prices could well extend to extremes, particularly below the floor of this range. Under an international agreement which looked beyond the moment, and had as one of its objectives the stimulation of exploration and development for the future, and further recognised that the general grade of ground and ore worked will be lower than before the war, a floor price of £650 would not be unreasonable. Wage increases in the East will lead to a slight upward trend in price.

J. A. DUNN,
14-10-1953.

SMELTER AND REFINERY PRODUCTION OF METALS IN AUSTRALIA.

Yearly totals.	Gold, Mine Issue, fine oz.	Silver, fine oz.	Copper (a) tons.	Pig Iron, tons.	Ingot Steel, tons.
1950	759,190	6,882,028	13,231	1,313,457	1,455,940
1951	754,519	6,978,191	13,543	1,331,384	1,467,152
1952	882,892	6,875,979	19,623(b)	1,535,400	1,641,500 +
Monthly totals—1953.					
January	56,056	67,878	493	134,000	157,000
February	80,847	285,450	1,520	134,000	145,000
March	80,318	517,550	1,179	165,000	165,000
April	65,268	556,589	1,793	158,000	159,000
May	80,910	776,658	830	146,000	172,000
June	97,160	572,057	2,466	152,000	172,000
July	107,872	596,360	278	156,000	185,000
August	88,727	645,080	239	158,000	187,000
September	80,720	563,353			
	737,878	4,580,975	8,798	1,203,000	1,342,000
Source:	R.M.	C.B.C.S.	A.M.M.	C.B.C.S.	C.B.C.S.
Yearly totals.	Lead (c) tons.	Lead Bullion (99.3% Pb.) tons.	Tin, tons.	Zinc, tons.	
1950	160,526	37,350(d)	2,013	83,652	
1951	165,758	32,155(f)	1,459	77,010	
1952	156,639	37,954(g)	1,700	87,438	
Monthly totals—1953.					
January	—	3,225	126	7,368	
February	5,205	2,900	117	6,714	
March	16,404	3,190	119	7,424	
April	15,948	3,060	99	7,110	
May	16,389	1,970	75	7,285	
June	15,717	3,485	126	6,754	
July	19,151	2,785	168	7,070	
August	17,617	2,765	117	7,445	
September	17,290	2,960	117		
	123,701	26,340	1,064	57,170	
Source:	A.M.M.			A.M.M.	

- (a) From domestic ores and concentrates only.
 (b) Contains a small amount from scrap
 (c) Yearly totals exclude lead recovered from scrap included in monthly totals.
 (d) Containing 37,021 tons lead
 (f) Containing 31,872 tons lead
 (g) Containing 37,709 tons lead

ALUMINIUM.

Prices. Australia £229 10/- per ton. U.K. £stg. 150 per ton. U.S. 21.5 cents per lb.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
Production.	Tons.	£	Tons.	£
Bauxite	1,048	—	2,289	—
Exports.				
Bauxite	46	714	51	793
Aluminium pigs, ingots, etc.	341	55,052	659	109,396
(a)				

Other shapes	17	9,251	29	12,923
Total	358	64,303	688	122,319
(a) Mostly remelted scrap.				
Imports.				
Bauxite	—	—	—	—
Aluminium Ingots	—	—	—	—
Canada	727	143,316	1,653	326,638
Norway	450	94,245	1,228	267,638
Others	18	3,124	19	3,302
Total	1,195	240,685	2,900	597,578
Other forms of Aluminium.				
U.K.	740	305,243	1,527	596,729
Fed. Rep. Germany	5	2,881	25	14,158
Other Countries	70	30,917	82	36,705
Total	815	339,041	1,634	647,592

Principal Producer Bauxite: Sulphates Pty. Ltd., 395 Collins Street, Melbourne, C.I.

ANTIMONY.

The recorded domestic output of antimony was only slightly up on the first quarter of the year and the mining section of the industry remains depressed. The disparity in the f.o.b. prices of exported and imported ores is remarkable, £56 per ton of concentrate for the former and £106 — to which freight must be added — for the latter.

Price. The domestic price of metal remains unchanged at £380 per ton.

Overseas, the market is still dull although there has been some increase in consumption in the United Kingdom, where metal recently dropped to £stg.210 per ton and ore at stg.20/- to 22/6 per unit for 60% ore. In the United States the prices remain at 34.50 cents per lb. for metal and ore at \$2.75 per short ton unit.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Mine Production.				
Metal content of ores	28		34	
Smelter Production.				
Refined antimony	n.a.		n.a.	
Exports.				
Ores & Cons.	—	—	87	4,891
U.K.	—	—	—	—
Imports.				
Ores & Cons.	—	—	—	—
South Africa	101	11,113	101	11,113
Other Countries	70	7,000	70	7,074
Total	171	18,113	171	18,187
Antimony metal	—	—	—	—
U.K.	1	318	1	318

*Does not include antimony contained in lead concentrates smelted in Australia or exported.

Principal Producers.

Blue Spec Mining Co. N.L., Nullagine, Western Australia
Point Lockout Antimony Mines Pty. Ltd., Point Lockout, N.S.W.
Victorian Antimony Mines L.d., Costerfield, Vic.

Smelters.

O. T. Lempiere & Co. Ltd., Sydney, New South Wales.

ASBESTOS.

Consumption of asbestos in Australia in the first half of 1953 continued at the annual rate established in 1952, estimated at 22,000 tons of all grades and types. Production, imports and exports were all higher than in the corresponding period of 1952, and stocks of some grades are building up. Output at Wittenoom has been maintained at a rate of nearly 4,000 tons per year and the company hopes to increase the rate in order to reduce costs of production.

Current prices for crocidolite are:—

1st grade—£200 per short ton (£224 per long ton) f.o.b. Fremantle.
2nd Grade—£160 per short ton (£179/4/- per long ton) f.o.b. Fremantle.
3rd grade—£150 per short ton (£168 per long ton) f.o.b. Fremantle.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Crocidolite	910	—	1,648	—
Chrysotile	250	—	508	—
Exports.				
Belgium	82	14,590	174	30,890
U.S.A.	272	46,450	688	119,931
Other Countries	37	6,754	67	10,035
Total	391	67,794	929	160,856
Imports—				
Crocidolite.				
South Africa	55	6,340	64	7,289
Other Countries	4	535	4	535
Total	59	6,875	68	7,824
Chrysotile.				
Canada	4,306	258,482	6,510	426,067
South Africa	210	18,297	372	39,879
Southern Rhodesia	38	3,766	121	12,610
Other Countries	27	2,925	35	3,603
Total	4,581	283,470	7,038	482,159
Amosite.				
Canada	—	—	309	26,928
South Africa	1,903	91,352	5,173	213,350
Other Countries	3	419	67	8,336
Total	1,906	92,352	5,549	248,614
Unspecified.				
Canada	—	—	—	—
South Africa	—	—	8	998
Other Countries	28	2,779	72	6,799
Total	28	2,779	80	7,797

Producers.

Asbestos Mines Pty. Ltd., Box 474, G.P.O., Sydney, N.S.W. (Chrysotile deposit at Bar-yulgil, via Copmanhurst, N.S.W.)

Australian Blue Asbestos Ltd., c/- Box 483, G.P.O., Sydney, N.S.W. (Crocidolite deposits at Wittenoom Gorge, W.A.)

L. G. Hancock, Nunyerri, W.A. (Chrysotile).

BARITE.

The increasing use of titanium white in preference to barite in the manufacture of certain classes of paint has reacted unfavourably to the demand for this mineral and production has fallen accordingly.

Prices of first, second and third grade barite, as advised by McLeod & Co., remain unchanged at £40, £30 and £12/10/- per ton, delivered Sydney.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production	1,165	—	2,140	—
Exports—				
Crude	80	1,848	80	1,848
Ground				
New Zealand	174	3,769	302	6,596
Papua	—	—	—	—
Others	—	—	10	230
Total	174	3,769	312	6,826
Imports—Ground	12	363	12	363

Producers.

South Australian Barytes Ltd. (mine location—Oraparinna, S.A.).
L. G. Abbott Co. Ltd., Box 366D, G.P.O., Adelaide (mine location—Noarlunga, S.A.).
Mitchell & Kleeman, Cranbrook, W.A.
Wm. Stephens, Upper Burragorang, N.S.W.
W. T. Harris and J. Bean, Rockley, N.S.W. (mine location—Kempfield, N.S.W.).

BEACH SANDS.

The decline in the price of rutile concentrates has continued in recent months, and in September Reuters Overseas Trade Service quoted concentrates, minimum 95% TiO₂, at £stg.33.35 per ton, c.i.f. U.K. ports.

Because of incomplete agreement between producers the move to stabilise the export price of rutile at a minimum of £48 per ton has not been successful and sales have been effected below £40.

The price of zircon remains virtually unchanged at £10 per ton, f.o.b. Brisbane.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Rutile	11,848	—	22,119	—
Zircon	7,897(a)	—	14,102(a)	—

(a) Includes 4,355 tons despatched from N.S.W.—production figures from that State being unavailable.

Exports.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Rutile cons.				
U.K.	2,503	133,653	4,461	230,158
U.S.A.	4,230	253,220	7,613	424,713
Others	3,135	163,432	7,000	370,064
Total	9,868	550,305	19,074	1,024,935

Zircon cons.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
U.K.	630	6,131	1,778	18,517
U.S.A.	7,556	72,775	11,431	110,246
Other Countries	698	7,507	1,649	17,584
Total	8,884	86,463	14,858	146,349

Principal Producers.

Zircon Rutile Ltd., Byron Bay, New South Wales.
N.S.W. Rutile Mining Co., Tweed Heads, New South Wales.
Mineral Deposits Syndicate, Southport, Queensland.
Titanium and Zirconium Industries, Stradbroke Island, Queensland.

BENTONITE.

Price. In September, 1953, Minerals Pty. Ltd. advised that the selling price of Western Australian bentonite was £19 per ton, delivered Perth.

S. N. Rodda Pty. Ltd. quoted unbagged Western Australian bentonite at £27/5/- per ton, ex works Melbourne, in December, 1952.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production (a)	35	—	55	—
Imports.				
U.K.	22	343	40	621
U.S.A.	417	5,350	1,013	12,758
Others	†	2	†	4
Total	439	5,695	1,053	13,383

(a) Excluding bentonitic clay from N.S.W.

Producers.

W. G. Fennell, Marchagee, W.A.
E. J. Noonan, Marchagee, W.A.
G. C. Margrie, Yarraman, Queensland.

BERYLLIUM.

The second quarter Western Australian beryl ore production was a record. Production was mainly from the Pilbara Goldfield with minor amounts from Noongal, near Yalgoo and Spargoville, near Coolgardie.

Prices. Australia: £15 per long ton unit of BeO in a minimum 9.5% BeO ore in bags at Australia ports.

U.S.: \$45 to \$47 per short ton unit of 10 to 12% BeO ore, c.i.f. U.S. ports.

The U.K. Government purchases all beryl ore produced in Australia through O. T. Lempriere & Co. Ltd., of Sydney.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	Units BeO.	Tons.	Units BeO.
Production.				
Beryllium Ore	59	702	82	1,022

Principal Producers.

The Australian beryllium ore output comes from the activities of individuals or small groups operating more or less on a prospecting basis.

BISMUTH.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	lb.	£.	lb.	£.
Production.				
Metal in cons.	—	—	147	—
Exports.				
Ores & Cons. (in cwt.)				
U.K.	—	—	19	453
Imports.				
Metal				
U.K.	6,856	7,318	17,489	18,813
U.S.A.	—	—	—	—
Others	3	9	5	15
Total	6,859	7,327	17,494	18,828
Carbonate.				
U.K.	152	235	908	1,657
U.S.A.	—	—	—	—
Total	152	235	908	1,657

CADMIUM.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Refined metal	73	—	124	—
Exports.				
Bars, rods, etc.	79	133,000	90	152,600
Ingots, blocks, etc.	—	834	12	17,316

Principal Producers.

Broken Hill Associated Smelters, Port Pirie, South Australia.
Electrolytic Zinc Co. of Australasia Ltd, Risdon, Tasmania.

CARBIDE.

Production of calcium carbide will be considerably increased as a result of the installation of a third furnace by Australian Commonwealth Carbide Co. Ltd. It is understood that the furnace came into operation in September.

In October, Tasmanian carbide was quoted at £81/15/- per ton, in 1 cwt. drums, and £79/15/- per ton, in 2 cwt. drums, c.i.f. Melbourne.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production	2,091	—	4,043	—
Exports.				
India	—	—	100	7,060
Aust. Territories	7	622	9	827
New Zealand	—	—	—	—
Others	11	780	17	1,271
Total	18	1,402	123	9,158

Imports—

			†	35
U.K.	—	—	296	9,264
South Africa	—	—	492	25,042
Italy	—	—	—	6
Other Countries	†	6	—	—
Total	†	6	788	34,347

Producers.

Australian Commonwealth Carbide Co. Ltd., Hobart, Tasmania.

CEMENT.

Statistics to hand indicate that the production of cement for 1953 will be considerably in advance of the 1,335,700 tons produced in 1952. Recorded production to the end of August was 1,023,000 tons compared with 746,400 tons in the corresponding period of 1952.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production	408,100	—	742,900	—
Exports.				
New Zealand	—	—	5,769	65,439
Papua/New Guinea	1,158	12,861	1,859	20,797
Fiji	540	5,914	970	10,753
Others	298	3,082	—	—
Total	1,996	21,857	9,327	104,557
Imports.				
United Kingdom	16,682	106,110	24,903	162,173
Japan	5,503	48,684	9,830	88,271
India	3,702	28,293	6,202	41,471
Others	148	2,279	323	5,663
Total	26,035	185,366	41,258	297,578

Producers.

Adelaide Cement Co. Ltd., Birkenhead, S.A.
Australian Portland Cement Pty. Ltd., Fyansford, via Geelong, Vic.
Commonwealth Portland Cement Co. Ltd., Portland, N.S.W.
Goliath Portland Cement Co. Ltd., Railton, Tasmania.
Australian Portland Cement Pty. Ltd., Kandos, N.S.W.
Metropolitan Portland Cement Ltd., Malden, N.S.W.
Queensland Cement and Lime Co. Ltd., Darra, Queensland.
Southern Portland Cement Ltd., Berrima, N.S.W.
Standard Portland Cement Ltd., Charbon, N.S.W.
Sulphide Corporation Pty. Ltd., Cockle Creek, N.S.W.
Swan Portland Cement Ltd., Rivervale, W.A.
South Australian Portland Cement Co. Ltd., Brighton and Angaston, S.A.

CHROMIUM.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production	—	—	—	—
Ore	—	—	—	—
Imports.				
Chrome Ore.				
New Caledonia	—	—	2,583	43,897
Southern Rhodesia	495	5,761	995	11,581
Other Countries	—	—	2	77
Total	495	5,761	3,580	55,555
Ferro-Chrome	1,027	232,530	1,065	242,622

CLAYS.

Price. Australian Industrial Minerals N.L. quoted kaolin at £15/10/- per ton, f.o.r. Lyndoch, S.A., in March, 1953. The retail selling price of kaolin, advised by McLeod & Co. in July, 1953, was £22 per ton, delivered Sydney.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Kaolin	2,991 (i)		6,538 (i)	
Brick Clay & Shale (estimated)	778,600		1,343,600	
Other	89,723		162,956	
Total	871,314		1,513,094	
Exports.				
New Zealand	112	2,450	147	3,276
Others	483	3,870	483	3,870
Total	595	6,320	630	7,146
Imports.				
Ball Clay.				
United Kingdom	45	320	109	833
Fire Clay.				
United Kingdom	146	1,918	295	6,215
China Clay (Kaolin).				
United Kingdom	—	—	60	941
Clay not				
United Kingdom	1	61	30	745
United States	68	1,615	123	2,332
Other	10	394	13	836
Total	79	2,070	166	3,913

COAL — BLACK.

The Australian black coal production in the first six months of 1953 was 1½ million tons less than in the corresponding period of 1952. Strikes and the closing down of open-cut mines on New South Wales' Western Coalfield contributed to the fall in production. Output in 1953 is expected to be rather more than 18 million tons. This is below the annual consumption rate, but industries will be able to draw on the large stocks built up over the last 18 months.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Queensland	647,091		1,228,032	
New South Wales	3,165,048		6,421,401	
Victoria	30,298		68,602	
Tasmania	60,757		111,566	
South Australia	106,425		203,308	
Western Australia	205,403		387,102	
Total	4,215,022		8,420,011	

Exports.

New Caledonia	31,542	150,750	85,206	412,083
Japan	—	—	56,067	238,658
Fiji	1,013	4,300	5,419	25,158
Others	2,287	9,717	2,249	9,748
Total	34,842	164,767	149,941	685,647

Imports.

India	—	—	17,013	56,409
South Africa	—	—	†	6
Others	3,157	26,219	3,162	26,266
Total	3,157	26,219	20,175	82,681

Principal Producers.

Broken Hill Pty. Co. Ltd., Newcastle, N.S.W.
 Australian Iron and Steel Ltd., Port Kembla, N.S.W.
 J. and A. Brown and Abermain and Seaham Collieries Ltd., Cessnock, N.S.W.
 State Coal Mine, Mangow, N.S.W.
 Aberdare Collieries Ltd., Ipswich, Queensland.
 Blair Athol Open Cut Collieries Ltd., Blair Athol, Queensland.
 Theiss Bros., Callide, Queensland.
 State Coal Mines, Wonthaggi, Victoria.
 Cornwall Coal Co., St. Mary's, Tasmania.
 State Mine, Leigh Creek, South Australia.
 Amalgamated Collieries of W.A. Ltd., Collie, Western Australia.
 Griffin Coal Mining Co. Ltd., Collie, Western Australia.
 Western Collieries Ltd., Collie, Western Australia.

COAL — BROWN.

	Quarter ended 30/6/53.	Half-year ended 30/6/53.
	Tons.	Tons.
Production	2,120,134	4,030,334

Producers.

State Electricity Commission, 22 William Street, Melbourne (mines at Yallourn).
 Maddingley Brown Coal Pty. Ltd., 411 Collins Street, Melbourne (mine at Bacchus Marsh).
 Moolamoonah Brown Coal Mine, Post Office, Thorpdale, Victoria.
 Star Collieries, 22 Mt. Alexander Road, Flemington, Vic. (mine at Bacchus Marsh).
 Winchelsea Coal Pty. Ltd., 22 Dymon Road, South Kensington (mine at Wensley Bray via Winchelsea).

COBALT.

	Quarter ended 30/6/53.	Half-year ended 30/6/53.
	Tons.	Tons.
Production.		
Cobalt oxide	3.88	9.09
Cobalt content	2.43	5.78

Imports of cobalt-bearing materials are not recorded separately.

Principal Producers.

Electrolytic Zinc Co. of Australasia Ltd., Risdon, Tasmania.

COPPER.

The increased output of copper in concentrates and blister is mainly accounted for by the output from Mt. Isa reaching the rated output of 1,500 tons per month; Mt. Morgan has also increased its output of blister copper. The local demand has temporarily failed to absorb some domestic production and this excess is being exported.

Price. The controlled domestic price was changed as from 16th October. The controlled price to fabricators and others is now £300 per ton; producers are receiving an additional £20 per ton from funds held by the copper pool, but this amount received by the three major producers is pooled and distributed amongst themselves by private arrangement. In the United Kingdom dealing in copper was resumed on 5th August and the spot price on the opening day was £stg.216 per ton, since then the market has fluctuated somewhat, but the tendency has been for the range to be £stg.230-240 per ton, somewhat higher than the pre-opening-L.M.E. forecasts had been. The United States market has been stable at 29-30 cents per lb. The negotiations between the Chilean and U.S. Governments for the purchase by the latter of the Chilean Government's accumulated stock of 150,000 tons have not yet been concluded. No matter what the outcome of these discussions, the question of the disposal of that part of Chile's future production which cannot be sold at 35.5 cents per lb. remains unsolved unless the Chilean price is reduced, thereby upsetting her economy.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Copper in cons.	9,565		16,347	
Smelter production.				
Blister copper	8,988		15,896	
Refined copper	5,089		8,281	
Exports.				
Blister copper and Refinery shapes.				
U.S.				
Other Countries	268	69,715	2,373	895,237
Total	268	69,715	710	168,708
Scrap copper	63	16,101	3,083	1,063,945
Imports.				
Ores & Cons.			149	37,341
Blister copper and Refinery shapes.	9	50	19	463
Belgian Congo				
Other Countries	2	1,081	1,500	520,564
Total	2	1,081	728	262,209
Scrap copper	1	95	2,228	782,773
			2	235

Principal Producers.

Mt. Isa Mines Ltd., Mt. Isa, Queensland.
Mt. Lyell Mining and Railway Co. Ltd., Queenstown, Tasmania.
Mt. Morgan Ltd., Mt. Morgan, Queensland.
Copper in dross, speiss, etc., from the smelting of lead concentrate—
Broken Hill Associated Smelters, Port Pirie, South Australia.
Mt. Isa Mines Ltd., Mt. Isa, Queensland.

Smelters.

Mt. Isa Mines Ltd.
Mt. Lyell Mining and Railway Co. Ltd.
Mt. Morgan Ltd.
Electrolytic Refining and Smelting Co., Port Kembla, N.S.W.

Refiners.

Mt. Lyell Mining and Railway Co. Ltd.
Electrolytic Refining and Smelting Co.

DAMOURITE.

Price. No notification has been received of any change in the price of damourite, quoted by Australian Industrial Minerals N.L. in March, 1953, at £9/10/6 per ton, f.o.b. Port Adelaide.

	Quarter ended 30/6/53.	Half-year ended 30/6/53.
Tons.		Tons.
n.a.		n.a.

Production

Producer.

Australian Industrial Minerals N.L., 35 Grenfell Street, Adelaide (lease at Mt. Crawford, S.A.).

DIATOMITE.

Price. In July, 1953, the selling price of first grade diatomite was quoted by McLeod & Co. at £37/10/- per ton, delivered Sydney.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production	781	—	1,520	—
Exports.				
New Zealand	7	403	21	1,208
Others	1	40	1	40
Total	8	443	22	1,248
Imports.				
U.K.	24	751	34	1,100
U.S.A.	928	24,327	1,211	32,947
Others	14	720	29	1,598
Total	966	25,798	1,274	35,645

Producers.

S. N. Rodda Pty. Ltd., Box 16, P.O., Port Melbourne, Vic. (deposit at Kilmore, Vic.).
G. A. Thomson Pty. Ltd., Newham, Victoria.
Campbell Bros. Limited, Bowen Hills, Brisbane (deposit at Black Duck, via Gatton).
Brisbane and Wunderlich, Lake Ngangara, W.A.
Minerals Pty. Ltd., 318 Botany Road, Alexandria, N.S.W. (deposit at Coonabarabran).

DOLOMITE.

	Quarter ended 30/6/53.	Half-year ended 30/6/53.
Tons.		Tons.
22,926		45,432

Production

Principal Producers.

The Broken Hill Proprietary Co. Ltd., Box 86A G.P.O., Melbourne (quarry at Ardrossan, S.A.).
Metropolitan Lime and Cement Co., Commerce House, Adelaide Street, Brisbane (lease at Ipswich).
C. A. Kruger & Sons Pty. Ltd., Bundamba, Queensland (lease at Ipswich).
Non Metallics Ltd., 74 Pitt Street, Sydney (deposit at Rylestone, N.S.W.).
Duck River Co. Pty. Ltd., Smithton, Tasmania.

FELSPAR.

Price. The prices of unbagged 100 and 200 mesh felspar quoted by S. N. Rodda Pty. Ltd. in December, 1952, were £21/12/6 and £25/15/- per ton, respectively.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production	1,679	—	2,774	—
Exports.				
New Zealand	44	1,505	44	1,505

Imports.			
United Kingdom	9	211	9
Norway	29	605	29
Others	2	36	2
Total	40	852	40

Principal Producers.

Australian Glass Manufacturers Co. Pty. Ltd., 420 Spencer Street, Melbourne (leases at Londonderry, W.A.).
 Australian Window Glass Pty. Ltd., P.O. Box 18, Alexandria, N.S.W. (lease at Brewongle, N.S.W.).
 Broken Hill Felspar Development Co., P.O. Box 396, Broken Hill, N.S.W.

FLUORSAP.

A little fluorspar was won in the Chillagoe area, Q., but the actual quantity is not recorded in the second quarter statistics. The recorded second quarter production was all from the Pine Mountain deposit, Victoria.

Prices quoted in February, 1953, by the principal agents — Frank Hambridge & Co. Ltd. — are:

Buying.

90% CaF₂—£11/2/6 per ton f.o.r. Mungana, Q.
 85% CaF₂—£9/17/6 per ton f.o.r. Mungana, Q.
 In each case plus 2/6 per unit above 85% or 90%.

Selling.

90% CaF₂—£23/17/6 per ton delivered Sydney.
 85% CaF₂—£22/7/6 per ton delivered Sydney.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£.	Tons.	£.
Production	53		181	
Imports.				
U.K.	114	4,092	216	9,753
South Africa	—	—	†	5
Total	114	4,092	216	9,758

Producers.

Prospectors and Syndicates in the Mungana-Chillagoe district, Queensland.
 Minerals (Vic) Pty. Ltd., Inalis Street, Port Melbourne, Victoria. (Pine Mountain deposit).

FULLER'S EARTH.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£.	Tons.	£.
Production	16	—	16	—
Imports.				
United Kingdom	13	141	26	281

Principal Producers.

D. J. and T. I. Read, Marchagee, W.A.
 E. B. Cornish, "Scoble," Whylandra, Dubbo, N.S.W.

GLASS SAND.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.		Tons.	
Production.				
Western Australia	1,940		3,280	
Other States	n.a.		n.a.	

Principal Producers.

Australian Glass Manufacturers Co. Pty. Ltd., 420 Spencer Street, Melbourne (leases at Rosebery, N.S.W., Lake Gnangara, W.A., supplies also obtained in S.A. and Vic.).
 South Australian Silicates Co. Pty. Ltd., Longwood, S.A.
 W. M. and R. J. Leach, Lake Gnangara, W.A.

GLAUCONITE.

	Quarter ended 30/6/53.	Half-year ended 30/6/53.
	Tons.	Tons.
Production	71	134

Producers.

G. E. Brook, Gin Gin, W.A.

GOLD.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Fine oz.	£.	Fine oz.	£.
Mine Production.				
Queensland	22,533		41,437	
New South Wales	6,765		11,774	
Victoria	15,327		32,490	
Tasmania	4,408		8,009	
South Australia	128		307	
Western Australia	200,576		392,833	
Northern Territory	14,460		26,516	
Total	264,197		513,366	
Territory of New Guinea	41,726		n.a.	
Exports.				
Ore & cons. (in lbs.)				
U.S.A.	42,686	2,317	83,230	4,594
Bar, dust, bullion.				
U.K.	546,574	5,650,516	525,059	8,588,980
France	85,757	1,401,235	136,074	2,224,493
Switzerland	22,017	361,211	44,035	722,422
Others	321	5,006	647	8,571
Total	454,689	7,417,968	705,815	11,544,466

Imports.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Imports.				
Bar, dust, etc.				
Papua and New Guinea	32,051	496,421	53,168	823,472
New Zealand	3,083	49,772	12,034	189,183
Fiji	31,083	507,900	39,061	639,268
Total	66,217	1,054,093	104,263	1,651,923

GRAPHITE.

A trial parcel of 20 tons of ore assaying 11% carbon was obtained from deposits at Munglinup, 70 miles west of Esperance, W.A., and it is reported that plans are in hand to start commercial production of high quality flake graphite. No production was recorded from Collinsville, Q., during the second quarter but the mine owners are advertising 76 to 80% amorphous graphite for sale on rail at Collinsville or shipped at Bowen.

Price. McLeod & Co. quote a retail price of £72/10/- per ton for first-grade amorphous graphite, delivered in Sydney.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£.	Tons.	£.
Production	2	—	2	—
Exports.				
New Zealand	1	37	3	246
Imports.				
Flake.				
U.K.	4	507	22	2,806
Other Countries	1	17	36	1,615
Total	4	524	58	4,421
Crystalline.				
U.K.	1	586	10	1,691
Madagascar	49	2,041	49	2,041
Other Countries	—	—	13	607
Total	50	2,627	72	4,339
Amorphous.				
U.K.	24	1,940	24	2,138
Ceylon	37	1,598	84	3,770
Other Countries	34	1,533	58	2,930
Total	95	5,071	166	8,838

Producers.

Zentner & Sanson, Collinsville Graphite Mines, P.O. Box 60, Collinsville, Q.
F. R. Drummond, Mungrinup, W.A.

GYPSUM.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£.	Tons.	£.
Production	81,641	—	153,362	—
Exports.				
New Zealand	2,000	1,600	9,028	12,576
Other Countries	301	3,013	301	3,013
Total	2,301	4,613	9,329	15,589
Imports	—	—	2	25

Principal Producers.

Australian Plaster Industries Pty. Ltd., Lorimer Street, South Melbourne, Vic. (leases at Bronzewing, Vic., and Conoble, N.S.W.)
Colonial Sugar Refining Co. Ltd., Box 483, G.P.O., Sydney, N.S.W. (leases at Conoble and Darnick, N.S.W., Lake MacDonnell, S.A.)
Waratah Gypsum Pty. Ltd. (leases at Stenhouse Bay, Lake MacDonnell and elsewhere, S.A.)
Griffith Gypsum Mines (Griffith, N.S.W.)
Brunswick Plaster Mills Pty. Ltd. (leases at Nowingi West, Vic.)
Broken Hill Pty. Co. Ltd., Box 86A, G.P.O., Melbourne (leases at Moonabie, S.A.)
Perth Modelling Works Ltd., 120-130 Claisebrook Road, Perth, W.A. (leases at Baandee and Yellowdine).

IRON AND STEEL.

The Australian iron and steel production continued to expand in the second quarter of 1953 and figures to hand indicate an even higher output in the third quarter. Present indications are that the 1953 output of pig iron and steel will be at least 1,750,000 tons and 1,950,000 tons respectively.

Demand for iron and steel products in overseas countries has tended to fall in recent months. U.S. steel mills have not been operating at full capacity but most companies have orders covering their fourth quarter output. Backlog of U.K. steel producers' orders is being reduced and there has been an accompanying fall in the export prices of certain steel products.

Prices. Pig Iron—

Australia, £18/7/6 per ton.

U.K.: £stg. 13/11/3 per ton.

U.S.: \$56-57 per ton.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£.	Tons.	£.
Production.				
Iron Ore				
S.A.	611,646	—	1,316,512	—
W.A.	209,018	—	388,228	—
Total	820,664	—	1,704,740	—
Iron Oxide				
N.S.W.	1,251	—	2,136	—
Tasmania	1,031	—	2,183	—
Total	2,282	—	4,319	—
Pig Iron	456,000	—	889,000	—
Ingot steel	503,000	—	970,000	—
Exports.				
Pig Iron	50,329	946,239	106,189	2,035,712
Ferro Alloys (1)	31	4,791	66	7,644
Steel (2)	71,354	2,378,726	97,144	3,287,095
Imports.				
Iron Ore	1	93	1	93
Pig Iron	126	35,959	164	42,110
Ferro Alloys (1)	13,631	1,455,013	40,369	3,866,995
Steel (2)	17,220	1,758,767	57,019	5,863,686

Principal Producers.

Broken Hill Pty. Co. Ltd., Newcastle, N.S.W.
Australian Iron and Steel Ltd., Port Kembla, N.S.W.
The Wood-Distillation, Charcoal-Iron and Steel Industry, Wundowie, Western Australia.

(1) Excludes Ferro-Chrome and Ferro-Manganese.

(2) Includes ingots and billets, bar rods, angles and tees, hoop, strips and plates.

LEAD.

The output of lead in concentrate showed a considerable increase in the first half of 1953 in comparison with the same period in 1952. Since the close of the half-year there has been a marked increase in output from the Broken Hill district and the total for the year may reach 190,000 tons of recoverable lead in concentrate.

Price. The maximum domestic price remains on the basis of the f.o.b. equivalent of the L.M.E. quotation.

On the L.M.E. there has been little movement, the price generally being within the range of £stg. 90-95 per ton. In the United States the market has been slightly easier, falling from 14 cents to 13.5 cents per lb., demand being slack.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Mine production.				
Lead in cons.	67,907		125,368	
Smelter production.				
Refined lead	48,034		69,643	
Lead in bullion	8,456		17,706	
Exports—Lead cons.				
Belgium	3,841	147,959	11,000	543,839
U.S.A.	7,365	480,218	9,340	625,780
Total	11,206	628,177	20,340	1,169,619
Lead Bullion.				
U.K.	6,090	805,574	22,914	3,333,175
Refined Lead.				
U.K.	23,021	2,314,062	29,021	2,852,586
U.S.A.	15,446	1,539,059	27,382	2,594,558
Others	2,664	357,345	3,030	519,464
Total	41,131	4,210,466	59,433	5,966,588

Principal Producers.**Mines.**

North Broken Hill Ltd.
Broken Hill South Ltd.
Consolidated Zinc Corporation Ltd.
New Broken Hill Consolidated Ltd.,
all of Broken Hill, New South Wales.
Electrolytic Zinc of Australasia Ltd., Rosebery, Tasmania.
Mt. Isa Mines Ltd., Mt. Isa, Queensland.
Lake George Mines Ltd., Captains Flat, New South Wales.

Smelters.

Mt. Isa Mines Ltd.

Smelters and Refiners.

Broken Hill Associated Smelters, Port Pirie, South Australia.

LIMESTONE.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.		Tons.	
Production	748,610		1,426,879	

Principal Producers.

Australian Portland Cement Pty. Ltd., 422 Collins Street, Melbourne (quarries at Fyansford, via Geelong, Vic., and Kandos, N.S.W.).
David Mitchell Estate, Olivers Lane, Melbourne (quarry at Lilydale, Vic.).
Broken Hill Pty. Co. Ltd., Box 86A, G.P.O., Melbourne (quarry at Rapid Bay, S.A.).
I.C.I. Alkali (Aust.) Pty. Ltd., 380 Collins Street, Melbourne (quarry at Penrice, S.A.).
The Commonwealth Portland Cement Co. Ltd., Portland, N.S.W.
The Standard Portland Cement Co. Ltd., Charbon, N.S.W.
Queensland Cement and Lime Co. Ltd., Darra, Queensland (deposit at Mud Island, Moreton Bay).
A.C.F. and Shirley's Fertilisers Ltd., Brisbane Road, Gympie, Queensland (deposit at Tamaree, via Gympie).
Goliath Portland Cement Co., Railton, Tasmania.
Melrose Agricultural Lime, H. E. Hallet, Quicba, Tasmania (lease at Melrose).

MAGNESITE.

Price. The selling price of raw magnesite, quoted by McLeod & Co. in July, 1953, was £20 per ton, delivered Sydney.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production	11,543	—	24,073	—
Exports.				
New Zealand	15	636	20	826
Others	2	104	7	802
Total	17	740	27	1,628
Imports.				
U.K.	3	507	8	947
India	10	552	21	1,140
Others	8	258	8	258
Total	21	1,317	37	2,345

Producers.

Seahill and Gibbons, Coolgardie, W.A.
Fifield Magnesite and Refractories Pty. Ltd., Camellia Works, Granville, N.S.W. (lease at Fifield).
Broken Hill Pty. Co. Ltd., Box 86A, G.P.O., Melbourne (leases at Fifield, N.S.W., and Bulong, W.A.).
R. F. and C. V. Hughes, P.O. Box 30, Young, N.S.W. (lease at Thudungra, N.S.W.).

MANGANESE.

Shipments of manganese ore from Western Australian ports have been delayed by the inability of large vessels to enter Port Hedland harbour. The consignments, totalling some 6,000 to 7,000 tons of ore, will be shipped to the United States in smaller vessels as soon as they become available.

Metallurgists of The Broken Hill Pty. Co. Ltd. have developed processes for the recovery of manganese from open hearth furnace slags. From information available it is possible that the bulk of the annual manganese requirements of the Australian steel industry could be recovered by the processes.

It has been reported that Russia is offering manganese ore to West European countries. The price is believed to be slightly under the London market price.

Price. Australia: Metallurgical ore—£10 per ton, f.o.b. Geraldton. Dioxide ore—£14/10/- per ton at rail, New South Wales railway siding, for 75% MnO₂ ore.

U.K.: Stg. 7/11 to 8/4 per unit, 48% Mn ore, c.i.f. European ports.

U.S.A.: \$1.18 to \$1.22 per unit, 48-50% Mn ore, c.i.f. American ports.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Metallurgical ore	4,213	—	8,216	—
Dioxide ore	372	—	566	—
Total	4,585	—	8,782	—
Exports.				
Manganese Ore	11	798	38	2,800
Ferromanganese	—	—	—	—

Imports.

Manganese Ore.					
Metallurgical ore	63	856	63	856	
Dioxide ore	43	484	43	484	
Ferromanganese.					
U.K.	15	3,275	55	11,230	
Norway	—	—	5	593	
Total	15	3,275	60	11,823	

Principal Producers.

Westralian Ores Pty. Ltd., Peak Hill, Western Australia.
Northern Minerals Syndicate, Gregory Range, Western Australia.

Principal Buyers.

Metallurgical Ore—The Broken Hill Pty. Co. Ltd., Newcastle N.S.W.
Dioxide Ore—Metals & Ores Pty. Ltd., Alexandria, N.S.W.

MICA.

The Australian market for mica has continued to improve and sales by the Mica Pool have risen to a more satisfactory level. Purchases by the Mica Pool at the April and August sales are greater than in the corresponding period 1952. No size 6 mica has been bought by the Pool this year and purchase of No. 5 (stained) was restricted at the August sales.

Overseas the market is weak and buyers have complete control.

Export of mica is controlled under Statutory Rule No. 82 (1947) of the Customs Act, and the control is under the advice of the Bureau of Mineral Resources, to which enquiries should be directed.

Prices per lb. approved by the Commonwealth Prices Commissioner for purchases and sales by the Mica Pool are as follows: Buying prices are at Alice Springs; selling prices are ex Mica Store, Melbourne.

	CLEAR		COMMERCIAL CLEAR.		STAINED.	
	Buying.	Selling.	Buying.	Selling.	Buying.	Selling.
Over extra special	225/-	258/9	156/-	179/6	82/-	94/3
Extra special	202/6	233/-	140/-	161/-	69/9	79/3
Special	175/-	201/3	121/-	139/3	56/-	64/6
A1	150/-	172/6	94/-	108/-	50/6	57/6
1	125/-	143/9	75/-	86/3	44/-	46/-
2	103/-	115/-	63/-	72/6	35/-	38/6
3	87/6	100/9	56/-	64/6	25/-	28/-
4	69/-	79/3	44/-	50/6	19/-	21/-
5	44/-	50/6	32/-	36/-	8/-	10/-
6	19/-	21/9	12/6	14/6	4/-	6/-

Purchases. April sales 23,400 lbs. August sales, 25,477 lbs. Total, 48,877 lbs. valued at £68,468.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	lbs.	£.	lbs.	£.
Imports.				
Block	9,375	7,316	11,775	9,131
Splittings	5,468	705	7,968	886
Scrap	—	—	—	—
Ground	2,012	42	2,012	42
Micanite	1,226	776	1,226	776
Exports.				
Block	4	39	9	64
Scrap	—	—	—	—
Ground	4,803	268	4,480	65
Micanite	n.a.	—	4,803	268

Producers.

Mining syndicates in the Harts Range and Plenty River districts, N.T.

Mica Pool.

The Commonwealth Mica Pool buys and sells all Australian-produced mica; the buyer visits Alice Springs in April, August and December.

MINERAL PIGMENTS.

Price. The selling price of pigments, delivered Sydney, quoted by McLeod & Co. in July, 1953, were:—

Raw umber, first grade, £19 per ton; Burnt umber, first grade, £36/10/- per ton; Yellow ochre, second grade, £25/10/- per ton; Red ochre, second grade, £20 per ton.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Red and Yellow	131		257	
Umber	10		10	
Imports.	462	22,505	784	37,873

Producers.

Red ochre—

Murchison Minerals (1951), Cnr. Austin and Robinson Streets, Cue, W.A. (leases at Weld Range, W.A.).

J. E. Cassidy, Weld Range, W.A.

A. Pearson, Spafford, Tasmania.

R. J. Smith, Ophthalmia Range, W.A.

Yellow ochre—

Zadow & Ball, Mindoolah, W.A.

Murchison Minerals (1951), Cnr. Austin and Robinson Streets, Cue, W.A. (leases at Weld Range, W.A.).

Production in New South Wales is from the Glen Innes, Dubbo and Mudgee districts.

MOLYBDENUM.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons	£.	Tons	£.
Production.				
Molybdenite cons.	—	—	—	—
Imports.				
Ferro-molybdenum	24	25,985	27	28,830

NICKEL.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Imports.				
Pigs, ingots, bars, etc.				
U.K.	153	95,006	312	190,417
Canada	4	2,145	8	4,430
Others	†	25	†	25
Total	157	97,176	320	194,872

PLATINUM AND PLATINUM GROUP METALS.

Prices. Platinum: U.K. £stg. 27 to £stg. 33½ per ounce.
U.S. \$92 to \$93 per ounce.

Platinum.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	oz.	£	oz.	£
Production.	—	—	—	—
Concentrates	—	—	—	—
Imports.	127	4,137	172	5,585

Osmiridium.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	g.	£	g.	£
Production.	—	—	—	—
Osmiridium Cons.	9	—	31	—

Platinum and Platinum Group Metals.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Exports.	—	—	—	—
U.K.	222	2,460	292	5,340

Platinum Group Metals.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Imports	—	—	268	2,714

POTASH.

Price. The price of fertilizer grade potash, quoted by Commonwealth Fertilisers & Chemicals Ltd. in October, 1953, was £34 3/6 per ton, ex works Yarraville. This price is subject to a 5/- per ton cash discount.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Imports—Fertilizer Grade.	—	—	—	—
Chloride.	—	—	—	—
France	2,696	52,228	3,346	65,610
Fed. Rep. Germany	1,867	39,582	4,323	92,240
Others	100	1,981	856	18,303
Total	4,663	93,791	8,525	176,153
Sulphate	705	15,939	1,235	28,083
Chemical Grade	114	14,158	331	40,010

QUARTZITE.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Production.	2,531(i)	—	4,914(i)	—

Producers.

Newhold General Refractories, P.O. Box 41, Mayfield, N.S.W. (leases at Rock Flat Lithgow and Nowra).
Minerals Pty. Ltd., 318 Botany Road, Alexandria, N.S.W. (leases at Lithgow).
The Broken Hill Proprietary Co. Ltd., P.O. Box 86A, G.P.O. Melbourne (lease in Whyalla district South Australia).

ROCK PHOSPHATE.

Price. For the year commencing 1st July, 1953, the selling price of high grade rock phosphate (Nauru, Ocean and Christmas Island) has been reduced from 125/- to 111/- per ton, c.i.f. & e. Australian ports.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Production	—	—	—	—
Imports.	n.a.	—	n.a.	—
Nauru	243,757	391,832	402,971	655,627
Christmas Is.	52,453	143,412	129,780	355,175

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Gilbert & Ellice Is.	56,196	91,620	151,673	166,670
Others	3	53	3	53
Total	352,409	626,917	634,427	1,177,525

SALT

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Production	n.a.	—	n.a.	—
Exports.	—	—	—	—
Rock Salt.	†	21	2	56
Table Salt.	—	—	—	—
New Guinea	22	355	27	499
New Zealand	2,188	15,410	3,213	20,987
Other Countries	48	743	270	3,412
Total	2,258	16,508	3,510	23,998
Salt n.e.i.	—	—	—	—
New Guinea	63	306	83	590
New Zealand	3,294	20,666	3,875	23,991
Phil.	20	219	68	748
Other Countries	60	819	130	1,784
Total	3,437	22,010	4,156	27,113

Imports.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Rock Salt.	—	—	—	—
U.K.	1,333	8,385	2,553	15,848
Table salt.	—	—	—	—
U.K.	238	10,549	297	13,486
Dairy Salt.	—	—	—	—
U.K.	110	1,740	110	1,740
Salt n.e.i.	—	—	—	—
U.K.	473	3,431	896	6,496

Principal Producers.

Bowen Salt Ltd., P.O. Box 62, Bowen, Queensland.
Cheetham Salt Pty. Ltd., Box 272, Geelong, Vic. (evaporating pans at Geelong and L.erton).
Australian Salt Co. Ltd. (Lake Bumbunga, Lake Fowler, Lake MacDonnell and Kangaroo Island, S.A.).
I.C.I. Alkali (Aust.) Pty. Ltd., 380 Collins Street, Melbourne, Vic. (pans at Price, S.A., salt lakes in N.W. Victoria).

SERPENTINE.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Production	n.a.	—	n.a.	—

SILLIMANITE.

	Year 1952		Quarter ended 31/3/53	
	Tons.	£	Tons.	£
Production	—	—	—	—
Massive sillimanite	437	—	1,341	—
Imports	†	63	†	63
Exports.	—	—	—	—
Massive sillimanite	—	—	—	—
Kaolinised sillimanite	—	—	—	—

Producers.

Australian Industrial Minerals N.L., 55 Grenfell Street, Adelaide (quarry at Mt. Crawford, S.A.).
 Thackaringa Syndicate, C/- Zinc Corporation, Broken Hill, N.S.W.

SILVER.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	fine oz.	£.	fine oz.	£.
Production.				
Mine	3,062,106		5,853,114	
Refined silver	1,905,304		2,776,182	
Exports.				
U.K.	1,586,532	603,460	2,648,981	1,004,613
Other Countries	2,040	612	2,040	612
Total	1,588,572	604,072	2,651,021	1,005,225
Imports.				
New Guinea	14,071	5,192	22,580	8,282
Phil	12,480	4,771	14,454	5,518
Others	4,237	1,556	5,629	1,980
Total	30,848	11,519	42,663	15,780

Principal Producers.

Lead-zinc mines: Broken Hill, New South Wales; Captain's Flat, New South Wales; Mt. Isa, Queensland; Rosebery, Tasmania.

Smelters and Refiners.

Royal Mints, Melbourne and Perth.
 Broken Hill Associated Smelters, Port Pirie, South Australia.
 Electrolytic Refining and Smelting Co., Port Kembla, New South Wales.

SULPHUR.

The recommendation by the Tariff Board following the enquiry during March, 1953, into the variations necessary in the Sulphur Bounty Act 1939-44 and the Customs Tariff 1953 to ensure that the production of sulphur and sulphuric acid in Australia, from indigenous sulphur bearing materials, is effectively protected against importations of sulphur, was that the Sulphur Bounty Act 1939-44 be amended to provide for—

(a) A bounty to be paid on sulphuric acid produced in Australia from Australian sulphur bearing materials, at a rate to be prescribed by Regulation after consideration by the Minister of a report and recommendation of the Tariff Board.

(b) A tentative upper limit of £600,000 to the amount of bounty that might be paid in any one year.

Price. Sulphur is imported by the British Phosphate Commissioners on behalf of a Pool, from which Australian consumers draw their supplies. As from the 1st July, 1953, the Pool price was fixed at £20/10/- per ton.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	S. content. £.	Tons.	S. content. £.
Production.				
Pyrite Cons.	33,805	16,041	65,603	31,197
Pyrite Ore	3,457	1,124	7,280	2,391
Total	37,262	17,165	72,883	33,588

Cons (a)

Imports.

Sulphur					
United States	29,992	29,992	362,027	50,958	612,004
Japan	—	—	—	5,484	244,457
Others	1,040	1,040	27,229	1,538	40,752

Total

(a) Refers to zinc concentrates roasted locally and from which the sulphur content is utilised in the manufacture of sulphuric acid.

Producers.

Sulphur. There is no production of elemental sulphur in Australia. Import of sulphur is through the sole agency of the British Phosphate Commissioners, Phosphate House, 515 Collins Street, Melbourne.

Pyrite. Norseman Gold Mines N.L., Norseman, W.A.
 Lake George Mines Pty. Ltd., Captain's Flat, N.S.W.
 Mount Morgan Mines Ltd., Mt. Morgan, Queensland.
 Mount Lyell Mining and Railway Co. Ltd., Queenstown, Tasmania.
 Zinc concentrate. See "Lead".

SUPERPHOSPHATE.

Price. Net cash prices of superphosphate in October, 1953, were:—

Queensland—272/9 per ton, ex works, in new jute bags.
 New South Wales—252/6 per ton, ex works, in new jute bags (pool price).
 Victoria—253/- per ton, ex works, in new jute bags.
 Tasmania—235/- per ton, users' nearest railway siding, in paper bags.
 South Australia—260/- per ton, ex works, in new jute bags.
 Western Australia—292/- per ton, ex works, in new jute bags.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production	455,800	—	850,700	—
Exports.				
New Guinea and				
Aust. Territories	154	2,193	162	2,452
Other British Countries	5	82	50	727
Others	—	—	2	32
Total	159	2,275	214	3,211

TALC.

Price. The prices of first grade white, and commercial grade talc, delivered Sydney, quoted by McLeod & Co. in July, 1953, were £38 and £18 per ton respectively.

	Quarter ended 30/6/53.		Half-year ended 30/6/53.	
	Tons.	£.	Tons.	£.
Production.				
Talc and Soapstone	2,009	—	4,228	—
Pyrophyllite	—	—	—	—
Total	2,009	—	4,228	—
Exports.				
French Chalk and Steatite				
Preparations	1	21	1	21
New Zealand	—	—	—	—
Imports.				
French Chalk and				
Steatite preparations	5	86	20	352
India	—	—	—	—
United Kingdom	—	43	—	43

Italy	5	146	12	458
Others	2	95	3	72
Total	12	342	35	922

Producers.

A. Bean, Mt. Monger, W.A.
 Universal Milling Co. Ltd, Three Springs, W.A.
 Mabey & Pearce, Bridgetown, W.A. (Soapstone)
 John Dunstan & Son (W.A.) Ltd, Box 1685, G.P.O., Perth, W.A. (leases at Mt. Fitten and Gumeracha, S.A.).
 Other producing centres are at Tumby Bay and Lobethal, S.A., and Wallendbeen, South Gundagai, Mudgah, Cobargo, N.S.W.

TANTALUM AND COLUMBIUM.

Prices. U.K.: Tantalite ore, 60% Ta_2O_5 , £stg.25-30 per unit of contained pentoxide.

Columbite ore, £stg.32 per unit of contained pentoxide.

U.S.: \$1.40 per lb. of combined pentoxides (minimum 35% $Ta_2O_5+Nb_2O_5$) plus a bonus equal to 100% of the base price.

Production.	Quarter ended 30/6/53		Half-year ended 30/6/53	
	lb.	$Ta_2O_5+Nb_2O_5$ content	lb.	$Ta_2O_5+Nb_2O_5$ content
W.A. (a)	2,675	1,903	4,933	3,497
(b)	4,606	3,409	6,403	4,877
Total	7,281	5,312	11,336	8,374

(a) Concentrates separated from tin-tantalite-columbite concentrates produced at Greenbushes.

(b) Tantalite-columbite concentrates.

Exports.	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons	£	Tons	£
U.K.	6	13,406	13	26,958

TIN.

The domestic output of tin in concentrate during the second quarter of 1953 was approximately equivalent to the average quarterly output during 1952 and was a marked improvement on this year's first quarter's production. However, the price offered for domestic concentrate is considerably less than the cost of production of many small producers who have been obliged to cease operations since July.

The Tin Producers' Association and the two smelting companies have approached the Commonwealth Government for some degree of protection from a price range in the world's market that would cause the partial extinction of the Australian industry; the Tariff Board has been instructed by the Government to report on the industry.

The United Nations have called a meeting of producing and consuming countries at Geneva on 16th November, 1953; the object is to equalise world production and consumption by means of export quotas and a buffer pool. The buffer pool will remedy any errors in estimates of consumption and will buy tin while the price is low and sell when high in order to endeavour to stabilise the world tin price.

Price. The domestic price of tin metal has been based on the landed cost of imported metal. The buying price of tin concentrates is still based on the Singapore metal price and smelting tariff and producers have been paid about 130/- per unit during the last few months.

In the United Kingdom, the price has not fluctuated widely, usually within the range of £stg.600-624 per ton. In the United States the price has ranged from 75-80 cents per lb.

The continuance of the low prices in the overseas markets has resulted in the closure of many high-cost producers in most countries, and generally has brought many more to near the break-even point.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons	£	Tons	£
Mine Production.				
Tin in cons.	427		654	
Smelter Production	299		661	
Exports.				
Tin cons.				
Malaya	5	4,143	12	9,721
Others	—	—	1	810
Total	5	4,143	13	10,531
Tin metal.				
U.K.	—	—	56	64,228
Others	4	3,929	4	3,992
Total	4	3,929	60	68,220

Imports.

Tin ingots.

Malaya

	180	205,375	180	205,375
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Principal Producers.**Mine.**

Aberloyle Tin N.L., Rossarden, Tasmania.

Smelters.

Sydney Smelting Co., Sydney, N.S.W.

O. T. Lempriere & Co. Ltd, Sydney, N.S.W.

TUNGSTEN.

The rate of output of scheelite increased somewhat for the first half of 1952. However, the output of wolfram is considerably less than for the same period in 1952, the principal cause being the reduced price and difficulty of selling; many small producers have been forced to turn their attention to some other metal or mineral.

Price. Little information is available about the buying price of concentrates. It has been reported that buyers in Europe have purchased some parcels at stg. 220/- to 250/- per unit. Recently the U.K. Ministry of Materials reduced its selling price to stg.220/- per unit, indicating a buying price (if the Ministry were buying) of stg.190/- to 200/- per unit. In the United States the price is \$38-40 per short ton unit.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons	£	Tons	£
Production.				
Scheelite Cons. (65%)	285		560	
Wolfram Cons. (65%)	132		276	
Total	417		836	
Units WO_3	27,100		54,300	
Metal Content, tons	215		431	

Exports.

Scheelite Cons.	76	127,981	157	225,829
U.K.	188	272,800	284	386,783
U.S.A.			5	6,824
Other Countries				
Total	264	400,781	426	619,436
Wolfram Cons.	68	86,352	267	364,794
U.K.	152	225,219	295	460,506
U.S.A.	24	26,309	37	44,369
Other Countries				
Total	244	337,880	599	869,669
Undesignated	27	32,474	27	32,474
U.K.	8	10,075	107	162,546
Other Countries				
Total	35	42,549	134	195,020

Principal Producers.

King Island Scheelite (1947) Ltd., King Island, Tasmania
Aberfoyle Tin N.L., Rossarden, Tasmania

Principal Buyers.

Derby & Co., Adelaide
O. T. Lempriere & Co., Sydney
British Metal Corporation, Sydney
Jack Hilton (Metals) Pty. Ltd., Sydney
Dickson Primer and Metal Traders London (Pty) Ltd., Sydney

ZINC.

The domestic mine output of zinc in concentrate showed a considerable increase in the second quarter in comparison with the first quarter of 1953. This increase will more than be maintained for the balance of the year owing to greatly increased output in the Broken Hill district since June (see "Lead").

Price. The price in the United Kingdom has been mainly within the range £stg. 70-75 per ton for g.o.b. with buying reported to be quiet. Although smelters in the United States have kept their price at 10 cents per lb. for several months, stocks of metal at smelters have recently increased to 125,000 tons, the highest for several years. On the Commodity Exchange, zinc has been sold as low as 8.75 cents per lb.

	Quarter ended 30/6/53		Half-year ended 30/6/53	
	Tons.	£	Tons.	£
Mine production.				
Zinc in cons.	59,112		108,497	
Smelter production.				
Slab zinc	21,149		42,655	
Exports.				
Zinc cons.	48,690	1,237,093	75,401	2,447,033
U.K.	9,132	139,881	29,846	1,293,748
Belgium			340	13,601
Other Countries				
Total	57,822	1,376,974	105,587	3,754,382
Slab zinc, etc.	2,517	222,750	10,070	1,193,171
U.K.	4,704	458,205	6,404	641,904
India	2,101	153,280	4,775	443,391
Other Countries				
Total	9,322	834,235	21,249	2,278,466

Principal Producers.

See "Lead."

Smelters and Refiner.

Electrolytic Zinc Co. of Australasia Ltd., Risdon, Tasmania