COMMONWEALTH OF AUSTRALIA.
DEPARTMENT OF NATIONAL DEVELOPMENT.
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS.

THE AUSTRALIAN MINERAL INDUSTRY

QUARTERLY REVIEW.

VOL. 5, No. 3.

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

DEPARTMENT OF NATIONAL DEVELOPMENT.

MINISTER — SENATOR THE HON. W. H. SPOONER.
SECRETARY — H. G. RAGGATT.

Bureau of Mineral Resources, Geology and Geophysics

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

THIS PUBLICATION IS PREPARED IN THE
Mineral Economics Section

CHIEF MINERAL ECONOMIST — J. A. DUNN.

PUBLISHED BY THE BUREAU OF MINERAL RESOURCES,
485 BOURKE STREET, MELBOURNE, C.1,
VICTORIA, AUSTRALIA.

Horticultural Press Pty. Ltd., 78a Victoria Street, Melbourne

EXPLANATORY NOTES.

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.		
Concentrates	Cons.		
Amended from previous issue	*		

AUSTRALIAN MINERAL INDUSTRY

QUARTERLY REVIEW

February, 1953

FREIGHT RATES ON MINERAL COMMODITIES.

In a country, such as Australia, where mining centres are at a considerable distance from the principal markets, freights for sea and rail transport may form a very important item of the total cost of producing and marketing a mineral. These transport costs include, of course, not only freight on the mining company's mineral product, but also freight paid on commodities required in producing the mineral—on coal, stores, plant, etc. For a particular mine the full details of all freight charges are not usually published; as a general rule only the over-all effect on cost can be noted. As an instance, Mt. Isa Mines Ltd. reports that every £1 of operating expenditure in the year ending 30th June, 1951, included 6/- paid to the Queensland State Railway.

In general, the larger proportion of the freight charges paid out directly by a mining company for transport outside the mineral lease are on account of the out-going mineral. These charges form an item of cost to which considerable attention must be paid in judging the success or failure of a particular mining project. Naturally, freight rates become increasingly important for the lower-priced mineral commodities, and this is particularly true of many of the non-metals—indeed, several of the non-metals, such as the clays and sands, can be worked only if deposits are right alongside the market.

In the absence of detailed knowledge of the relation of freights to over-all costs in the principal mining centres, it is of interest to relate them to current mineral or metal values. In the accompanying Table, rail and coastal and overseas shipping freight rates on certain minerals and metals are compared on a percentage basis with mineral and metal values ruling in January, 1953. The values to which the freights are compared are the market prices of the metals or minerals. In the case of concentrates, the value is that of the recoverable metal content according to the market price of the metal; however, this is not quite a correct picture for concentrates which are sold as such (e.g. zinc concentrates from Mt. Isa) as for these the producer receives in effect the value of the recoverable metal less treatment charges—still, for these concentrates the percentages give a picture related to that for metal treated in Australia. In the case of lead bullion, blister copper, and lead, zinc and copper concentrates, the value of the gold and silver content has not been included, and in general a small adjustment would need to be made on their account.

It will be noted, amongst the base metals, that freight charges bear most heavily on zinc concentrates. The movement of zinc concentrates from Broken Hill to Newcastle for roasting, thence to Risdon, has recently terminated; freight across New South Wales represented 14% of the overseas price (15% of the Australian price), and total freights on zinc marketed overseas amounted to 27%—these figures provide one of the main reasons why zinc concentrates are no longer railed across N.S.W.

Based on the present price of zinc £stg.83 (£104) per ton, and assuming a 50% grade of concentrate, together with a recovery of 84% at the smelter,

RAIL AND SEA FREIGHTS ON METALS AND MINERALS IN 1953.

All values are in Australian currency.

METALS.

Metal.	Value per ton of metal. £A	Rail Freight per ton. From — To	Rate.	Per ton of recoverable metal.	Percentage of value.	Sea Freight per ton. From — To	Rate.	Per ton of recoverable metal.	Percentage of value.	Total Percentage of value.
Lead, bullion (a)	U.K. £116	Mt. Isa—Townsville	106/4	—	4.6	Townsville—U.K.	131/3	—	5.8	10.4
,, cons. (a)	U.K. £116	Captains Flat—Sydney	75/6	135/-	6.0	Sydney—U.K.	81/3	147/6	6.5	12.5
,, cons. (a)	U.K. £116	Northampton—Geraldton	29/-	38/-	1.6	Geraldton—U.K.	81/3	106/6	4.6	6.2
,, cons. (a)	Aust. £95	Broken Hill—Port Pirie	65/8	91/2	4.8	—	--	—		4.8
,, cons.	U.K. £116	Broken Hill—Port Pirie	65/8	91/2	4.0				)	
,, refined						Port Pirie—U.K.	137/6		6.0)	10.0
Zinc, cons.	U.K. £104	Mt. Isa—Townsville	56/3	139/-	6.4	Townsville—U.K.	143/9	328/-	16.5	22.9
,, cons.	U.K. £104	Broken Hill—Port Pirie	64/8	147/-	7.2	Port Pirie—U.K.	150/-	340/-	16.7	23.9
,, cons. (a)	Aust. £95	Broken Hill—S.A. ports	64/8	147/-	7.75	S.A. ports—Risdon	49/-	111/6	6.05	13.6
,, cons. (a)	U.K. £104	Broken Hill—S.A. ports	64/8	147/-	7.2	S.A. ports—Risdon	49/-	111/6	5.5)	
,, slab						Risdon—U.K.	131/3	—	6.4)	19.1
,, cons. (a)	Aust. £95	Broken Hill—Newcastle	129/-	293/-	15.4	Newcastle—Risdon	60/6	136/-	7.16	22.56
,, cons. (a)	U.K. £104	Broken Hill—Newcastle	129/-	293/-	14.3	Newcastle—Risdon	60/6	136/-	6.7)	
,, slab						Risdon—U.K.	131/3	—	6.4)	27.4
,, cons. (a)	U.K. £104	Captains Flat—Sydney	75/6	171/-	8.7	Sydney—U.K.	81/3	184/-	9.3	18.0
Copper, blister	Aust. £350	Mt. Isa—Townsville	296/3*	—	4.22	Townsville—Port Kembla	186/-*	—	2.65	6.87
,, blister (a)	Aust. £350	Mt. Morgan—Rockhampton	36/3	—	0.51	Rockhampton—Port Kembla	181/6	—	2.60	3.11
,, cons. (a)	Aust. £350	Cobar—Port Kembla	108/-	655/-	9.35					
,, cons.	Aust. £350	Captains Flat—P. Kembla	64/-	330/-	4.70					

NON-METALS.

Commodity.	Selling Price:	Rail Freight per ton. From — To	Rate.	%age of value.	Sea Freight per ton. From — To	Rate.	%age of value.	Total %age of value.
Fluorspar	£22/7/6 per ton del. Sydney	Mungana—Cairns	50/-	11.2	Cairns—Sydney	196/-	44.0	55.2
Manganese	By negotiation	Meekatharra—Geraldton	31/3	—	Fremantle—Newcastle	158/-	—	
Mica	£2,690 per ton	Harts Range—Alice Springs (road)	300/-	.68				
		Alice Springs—Melbourne	627/-	1.16				1.16
Gypsum		Nowingi West—Melbourne	55/7					
,,	£1/18/- f.o.r.	Ivanhoe—Sydney	84/6					

(a) Excludes any payments for gold and silver.

* General freight rate, no specific rate for copper, application is being made for a reduced rate on blister copper.

the combined rail and sea freights on zinc concentrates from Broken Hill or Mt. Isa to the United Kingdom would amount to approximately 55% of the value of the concentrate to the producer, c.i.f. U.K. ports. The value of the metal per ton of zinc concentrate would be of the order of £43, from which the deduction of smelting and related charges leaves a c.i.f. price of £17-18, from which all freight and other charges must be paid.

Such freight considerations are naturally of great concern in opening up a new property. For example, an investigation is at present being made into the possibility of developing a zinc-pyrite mine in New South Wales. A local ore buyer recently quoted the value of a 50% zinc concentrate at £21 per ton, f.o.b. Sydney, on a basis of zinc at £stg.96 (£120) per ton. The mine is situated much farther from the seaboard than is Captains Flat, but even if the Captains Flat-Sydney freight on zinc concentrates is taken as a basis, rail freight would absorb 18.7% of the f.o.b. value of the concentrate, whilst at the present overseas ruling price £stg.83 (£104) the rail freight would be of the order of 29% of the value.

Although freights on lead concentrates do not represent as high a proportion of the total cost as in the case of zinc—partly because of their generally higher metal content—nevertheless freights are of importance, particularly where the lead concentrates are shipped overseas for smelting and where the lead content is considerably less than in the Broken Hill lead concentrates. At the present price of lead on the London Metal Exchange, £116 per ton, lead concentrates containing 56% lead, from Captains Flat would be worth about £42, c.i.f. U.K. or continental ports. The combined rail and sea freights would be of the order of 18% of this amount.

In the Table, freights on a few minerals of the non-metallic type have been given. In some cases, such as for manganese ore, the price paid is determined by negotiation between producer and consumer, or the mineral may be produced by the consumer who utilises it as a constituent of a manufactured product.

Fluorspar provides an instance of the restrictive effects of high freight rates on a low priced mineral. An ore buying agent purchases fluorspar from the miners at £9/17/6 per ton on rail, Mungana, Queensland. Combined rail and sea freight from Mungana to Sydney (the principal consuming centre) is £12/6/- per ton, bringing the total cost to the agent to £22/3/6, on wharf, Sydney. The agent delivers the material to the consumer at £22/17/6 per ton, allowing a margin of only 14/- per ton from which he must pay commission and handling charges. Miners in the Mungana district are demanding a higher price for fluorspar to induce them to remain in this rather than other avenues of employment, but the ore-buyer cannot offer this inducement without incurring a trading loss or raising the price to consumers to a level which would be above the landed cost of imported fluorspar. Neither the miners nor the agent have any incentive to maintain or increase production, which has fallen from 560 tons in 1949 to an estimated 50 tons in 1952. This decline cannot be attributed solely to high freight rates, but they have undoubtedly had a considerable influence upon it.

In northern New South Wales during 1951, one beach sand operator produced a trial parcel of 1,000 tons of ilmenite acceptable to a continental buyer for pigment manufacture. The agreed price, f.o.b. Brisbane, just covered the then cost of delivering to the ship's side. The freight increase in New South Wales towards the end of that year turned the transaction into a considerable loss and any idea of building up an export trade in that commodity has been discarded for the present. With the recent decline in price and demand for zircon, it is likely that rail freights have influenced some zircon producers in the Byron Bay district in their decision to discontinue production of zircon, which is essentially an export commodity.

The production of pyrites has been the subject of a great deal of discussion and action by sulphuric acid producers in Australia during recent years. The prices paid per unit of sulphur content of pyrites by various users are generally low and appear to be negotiated, based on considerations other than the total cost of production of pyrite. It is accordingly difficult to make any comparison between selling price and combined freights that would be valid.

For a high-priced commodity such as sheet mica, rail freight becomes a less important item of cost. However, on scrap mica freight is virtually prohibitive. The demand for scrap mica has become very strong in recent years, many hundreds of tons are available at the mine dumps in the Harts Range. But, excluding any labour charges, the freight alone on such mica railed to the coast (Adelaide) would be not less than £35. The general market price for scrap has been of the order of £25.

The above remarks have referred simply to the effect of freights on the overall cost-price picture. They have necessarily not taken into consideration the variable rail freight rates according to haulage distance, or the rates charged in different States. Freights on zinc concentrates may be examined as an instance:

Mt. Isa to Townsville (Queensland)—1.35d. per ton mile.

Broken Hill, S.A. border—Port Pirie (S.A.)—3d. per ton mile.

Captains Flat-Sydney (N.S.W.)—5d. per ton mile.

Of these, the Queensland haulage is by far the longest, and Captain's Flat to Sydney the shortest; nevertheless the figures do indicate the attention which the Queensland Railways have given to the haulage costs of this important State asset.

For lead concentrates, the rates per ton mile over South Australian and N.S.W. Railways from Broken Hill and Captain's Flat respectively are as above for zinc concentrates. For lead concentrates despatched from Northampton to Geraldton, W.A., the rate is approximately 1/- a ton mile, but for a distance of only 30 miles and is, therefore, not unreasonable. For manganese ore, the freight from Meekatharra to Geraldton (355 miles) is about 1d. a ton mile.

The data in this note emphasise the important role which low freight rates must play in the development of Australian mineral resources and thus in the development of secondary industries. With falling prices and keener competition overseas it will be necessary to keep freight rates under constant review.

SMELTER AND REFINERY PRODUCTION OF METALS IN AUSTRALIA.

Yearly totals.	Gold, Mint Issue, oz., fine.	Silver (a), oz., fine.	Copper (b), tons.	Pig Iron, tons.	Ingot Steel, tons.
1949	794,375	5,857,502	9,858	1,029,300	1,131,100
1950	759,190	6,882,028	13,552	1,314,800	1,425,600
1951	754,519	6,978,191	12,483	1,335,900	1,434,300
Monthly totals—1952.					
January	54,034	535,411	1,437	129,800	140,100
February	31,480	563,521	677	119,400	128,600
March	107,184	523,182	1,050	128,100	137,600
April	14,779	491,840	1,510	119,800	118,100
May	61,747	615,621	1,387	96,700	92,100
June	125,142	444,559	2,521	93,000	99,700
July	56,985	431,626	788	122,300	147,200
August	65,633	804,389	1,634	133,200	153,100
September	99,629	588,416	1,077	150,400	152,100
October	46,538	755,416	1,788	157,800	166,000
November	131,089	605,337	2,250	144,200	154,500
December	88,082	520,838		140,700	
	882,322	6,880,156	16,119	1,535,400	1,489,100
Source:	R.M.	C.B.C.S.	A.M.M.	C.B.C.S.	C.B.C.S.

Yearly totals.	Lead, tons.	Lead Bullion (99.3% Pb.) tons.	Tin, tons.	Zinc, tons.
1949	150,056(c)	32,901(d)	1,955	80,956
1950	160,526(c)	37,350(e)	2,013	83,652
1951	165,758(c)	32,155(f)	1,459	77,010
Monthly totals—1952.				
January	13,438	3,075	149	7,295
February	11,501	3,125	86	6,843
March	11,433	3,015	105	7,393
April	12,333	3,210	189	7,429
May	14,841	3,085	72	7,729
June	7,221	3,325	204	7,226
July	15,727	3,310	213	7,268
August	16,860	3,015	107	7,316
September	15,484	3,235	123	7,072
October	15,302	3,420	193	7,338
November	15,661	3,090	103	7,117
December	9,815	3,049	156	7,422
	159,616	37,954	1,700	87,448
Source:				A.M.M.

(a) Yearly totals neglect small recovery of secondary silver from scrap, etc., included in monthly totals.

(b) From domestic ores and concentrates only but includes some cathode copper sold direct to industry.

(c) Yearly totals exclude lead recovered from scrap.

(d) Containing 32,621 tons lead.

(e) Containing 37,021 tons lead.

(f) Containing 31,872 tons lead.

ALUMINIUM.

Testing of the bauxite deposits on Wessell Islands has continued and a deposit on one island has been proved to contain 10 million tons of ore. This deposit alone could supply the present requirements of the Bell Bay works for the next 130 years. Two other deposits, believed to be much larger, have been discovered on the mainland close to Cape Arnhem, Northern Territory.

In order to conserve the domestic resources of bauxite for Australia's own requirements, the export of bauxite is prohibited. The export of aluminium in ingot form is also prohibited.

The domestic price for ingot aluminium remains unchanged at £236/10/- per ton.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£	Tons.	£.
Production.				
Bauxite	1,865		5,506	
Imports.				
Bauxite	—		13	1,870
Aluminium Ingot				
Canada	1,192	241,462	4,204*	754,592*
Norway	919	188,074	1,877	384,640
Other Countries	11	5,051	105*	25,683*
Total	2,123	434,537	6,186*	1,164,915*
Other forms of Aluminium				
U.K.	565	156,392	3,193*	916,046*
Fed. Rep. Germany	9	3,472	164*	79,361*
Other Countries	30	16,373	547*	261,169*
Total	604	176,237	3,904*	1,256,576*
Exports.				
Aluminium pigs, ingots, etc.	—	—	†	18
Other shapes	2	2,661	65	10,769
	2	2,661	65	10,787

Principal Producers: Sulphates Pty. Ltd., 395 Collins Street, Melbourne, Vic.

ALUNITE.

Alunite (Aust.) Pty. Ltd., Bullahdelah, N.S.W., is the only producer of alunite in Australia. The total output is sold to Sulphates Pty. Ltd., Melbourne, for the production of alum salts.

	Quarter ended 30/9/52.		Nine months ended 30/6/52.	
	Tons.	Est. K_2O (tons)	Tons.	Est. K_2O (tons)
Production	—	—	314	24

Producer.
Alunite (Aust.) Pty. Ltd., Bullahdelah, N.S.W.

ANTIMONY.

O. T. Lempriere & Co. have resumed purchasing antimony ores, the prices being paid are nominal and producers will be advised of them on application to the smelter.

Production of antimony ore and concentrates amounted to 23 tons during the third quarter of 1952, this does not include the output of any antimony-gold concentrate from the Blue Spec Mining Company, Western Australia. The antimony content of lead concentrate produced in New South Wales was reported to be 150 tons, a portion is in lead concentrate exported, and the balance is in lead concentrate smelted at Port Pirie, South Australia.

Consumption overseas remained low, that in the U.K. being only 657 tons for the third quarter, 1953.

Price. The domestic price of metal remains unchanged in February, 1953, at £420 (nom.) per ton, and there have been no changes in either the U.K. (£stg.220 per ton) or the U.S.A. (34.50 cents per lb.) prices. Buying prices for ore remain unchanged at nominal rates.

There are no restrictions on the export of either antimony ore or metal.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Mine Production.				
Antimony in Antimony cons.*	13		125	
Smelter Production.				
Refined antimony	n.a.		n.a.	
Imports.				
Antimony ore and cons.				
South Africa	98	20,968	510	99,146
Antimony metal.				
U.K.	6	2,051	6	2,173(a)

Some antimony metal may have been exported but it is not recorded as a separate export item.

Principal Producers.
Blue Spec Mining Co. N.L., Nullagine, Western Australia.

Smelter.
O. T. Lempriere & Co. Ltd., Sydney, New South Wales.

*Does not include any contained in lead concentrate smelted in Australia or exported.

(a) Including value of few cwt. imported in first quarter.

ASBESTOS.

Australian production of crocidolite fibre during 1952 reached the record amount of 2,940 tons, or more than double the previous record established in 1951. Chrysotile production during the third quarter was at a higher rate than in the corresponding quarter of the previous year and the total for 1952 may also reach a record level.

Consumption of all forms of asbestos during the third quarter continued at the high level reached in the second quarter of 1952.

Prices for Australian crocidolite have remained unchanged since January, 1952, as follows:—

1st grade — £336 per ton, f.o.b. Fremantle.
2nd grade — £252 per ton, f.o.b. Fremantle.
3rd grade — £190/8/- per ton, f.o.b. Fremantle.

Quotations for Canadian and U.S. asbestos of all sizes except group 1 were advanced by up to 10% during 1952.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production.				
Crocidolite	798		2,095*	
Chrysotile	342		794	
Imports—				
Crocidolite.				
South Africa	106	15,240	106	15,240
Other Countries	51	6,475	51	6,475
Total	157	21,715	157	21,715
Chrysotile.				
Canada	4,551	329,389	6,902	509,744
South Africa	209	15,318	683	37,833
Southern Rhodesia	351	34,086	520	55,492
Other Countries	—	—	575	65,420
Total	5,111	378,793	8,680	668,489
Amosite.				
Canada	760	51,516	1,035	72,650
South Africa	2,275	135,474	8,028	393,896
Other Countries	179	25,168	482	58,946
Total	3,214	212,158	9,545	525,492

	Quarter ended 30/9/52. Tons.	£.	Nine months ended 30/9/52. Tons.	£.
Unspecified.				
Canada	308	20,329	1,657	120,043
South Africa	566	32,770	1,021	71,725
Other Countries	298	31,958	515	57,998
Total	1,172	85,057	3,193	249,766
Exports.				
U.S.A.	52	7,975	154	22,216
Other Countries	184	30,910	550	91,746
Total	236	38,885	704	113,962

Producers.

Asbestos Mines Pty. Ltd., Box 474, G.P.O., Sydney, N.S.W. (Chrysotile deposit at Baryulgil, 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.

Production of barite in the third quarter of 1952, 660 tons, showed a marked decline compared with that produced in the first and second quarters, 1,662 tons and 1,547 tons respectively. Indications are that production for the year will be far short of the 6,178 tons produced in 1951.

The price of first, second and third grade barite, delivered Sydney, quoted by McLeod & Co. at £40, £30 and £15/7/6, has remained unaltered since November, 1952.

	Quarter ended 30/9/52. Tons.	£.	Nine months ended 30/9/52. Tons.	£.
Production	660		3,869	
Imports—Ground	—	—	49	1,081
Exports—Crude.				
Papua	—	—	100	1,800
New Zealand	97	2,842	108	3,162
Total	97	2,842	208	4,962
Ground.				
New Zealand	162	3,902	605	13,285
Papua	135	2,447	300	5,421
Others	165	3,540	239	5,279
Total	462	9,889	1,144	23,985

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 data available at the end of the third quarter 1952, indicate an increase in the production of rutile for 1952 and a considerable decrease in the zircon output. The steep increase in railway freights during the past eighteen months may have had some influence on the decision to discontinue producing this low-priced commodity.

The export of clean separated concentrates is subject to license, but is readily permitted provided they do not contain more than 0.5% monazite.

Licenses will be freely issued for the export of monazite concentrates to the United Kingdom. Export of unseparated sands is prohibited, except small parcels for experimental purposes.

Price. The U.K. price for rutile is listed at £stg.55-60 and for zircon £stg.13-16 per ton, both c.i.f. U.K. ports. Prices received by producers have been variable ranging from £30-65 for rutile and £10-15 for zircon, f.o.b. Australian main ports. The prices quoted are those ruling during the third quarter 1952, and are the most recent available.

	Quarter ended 30/9/52. Tons.	£.	Nine months ended 30/9/52. Tons.	£.
Production.				
Rutile	11,045		28,450	
Zircon	7,515		24,444	
Exports.				
Rutile cons.				
U.K.	2,440	93,068	7,128	261,770
U.S.A.	6,220	268,316	13,499	572,637
Other Countries	1,940	88,203	6,476	260,135
Total	10,600	449,587	27,103	1,094,542
Zircon cons.				
U.K.	645	8,351	2,111	27,968
U.S.A.	5,839	66,071	15,457	183,004
Other Countries	390	4,330	2,015	26,369
Total	6,874	78,752	19,583	237,341

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.

Zirconium and Titanium Industries, Stradbroke Island, Queensland.

BENTONITE.

The Western Australian production of bentonite to the end of the third quarter of 1952 was considerably in advance of the total output of 449 tons from that State recorded in 1951.

Since November, 1952, the price of unbagged, Western Australian bentonite has been quoted by S. N. Rodda Pty. Ltd. at £27/5/- per ton, ex works, Melbourne.

	Quarter ended 30/9/52. Tons.	£.	Nine months ended 30/9/52. Tons.	£.
Production (a)	70(i)		556(i)	
Imports.				
United Kingdom	42	542	129	1,586
United States	686	9,735	2,456	29,211
Others	25	413	57	814
Total	753	10,690	2,642	31,611

Producers.

W. G. Fennell, Marchagee, W.A.

E. J. Noonan, Marchagee, W.A.

G. C. Margrie, Yarraman, Queensland.

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

BERYLLIUM.

Western Australia remains the sole producer of beryl in Australia, production elsewhere having ceased. Prospecting at Spargoville, 27 miles south of Coolgardie, has disclosed several large pegmatite bodies rich in beryllium. Concentrates from this locality average 13% BeO. Additional supplies of beryl should also be available from the Londonderry quarry of the West Australian Felspar Company. Producers in one State contend that the price offered by the U.K. Ministry of Supply is too low and that they will not resume production until the price is raised.

Price. The U.K. Ministry of Supply's price remains unchanged at £15 per unit BeO, f.o.b. Australian ports. In January, 1953, ore containing 10-12% BeO was quoted in the United States at $45-$47 per short ton unit delivered Atlantic ports.

	Quarter ended 30/6/52.		Nine months ended 30/9/52.	
	Tons.	Units BeO.	Tons.	Units BeO.
Production.				
Beryl Ore	18.00	223.82	67.22	809.93

Producers.

Numerous small producers.

BISMUTH.

There is no mining for bismuth as such in Australia at the present time, but some bismuth is produced as a by-product of working some complex tin-wolfram deposits. For this reason production is variable. The apparent consumption of bismuth metal is of the order of 10-12 tons per year, but it is believed that the actual consumption is in excess of that figure. Any increase in domestic production could be readily absorbed.

Price. Domestic prices at 1st February, 1953, were as follows:—Metal, 35/3 per lb.; ore, 20/- per lb. of metal content for ores containing 70% or over. The U.K. prices in December, 1952, were considerably less than the above at: Metal, stg.17/6 per lb.; ore stg.9/9 per lb. metal content for 65% ore or concentrate.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Cwt.	£.	Cwt.	£.
Production.				
Metal in cons.	†		28*	
Imports.				
Metal				
U.K.				
U.S.A.				
Carbonate.				
U.K.	5	1,322	39	9,408
U.S.A.	—	—	5	1,082
Total	5	1,322	44	10,490

Producers.

Bismuth Products Pty. Ltd., Sydney.

CADMIUM.

Refined cadmium is produced in Australia as a by-product of the smelting and refining of lead and zinc concentrate. Some cadmium carbonate is produced at Mt. Isa and is exported as such. Exported lead and zinc concentrate contains cadmium, but the cadmium content is not recorded in some States and the records are therefore incomplete.

The export of cadmium is controlled; this was introduced to protect the producers who were selling to domestic consumers at a price considerably lower than that ruling overseas. Considerable quantities of metal thus sold were found to have been exported.

Price. The base price for cadmium in Australia on 3rd February, 1953, was 18/- per lb. The price in the U.K. and U.S. was variable, falling as low as stg.10/9 and $1.50 cents per pound, but it quickly returned to stg.14/4 and $2 in January, 1953.

	Quarter ended 30/9/52.		Nine Months ended 30/9/52.	
	Tons.	£.	Tons. 30/6/52.	£.
Production.				
Refined metal	55		209	
Cadmium content of concentrates treated locally and exported is not determined.				
Exports.				
Bars, rods, etc. U.K.	56	114,143	97	214,802
Ingots, blocks, etc. Destination not available ..	13	26,507	39	90,891

Principal Producers.

Broken Hill Associated Smelters, Port Pirie, South Australia.

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

CARBIDE.

Imports of calcium carbide to the end of the third quarter of 1952, 10,951 tons, showed a spectacular advance over the quantity imported during the previous year, 2,341 tons. This increase is due to improved availability of shipping.

	Quarter ended 30/9/52.		Nine Months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	1,997		5,241	
Imports—				
South Africa	973	32,505	3,061	119,659
Belgium	1,969	87,000	4,451	201,846
Norway	1,535	60,683 C 6	3,177	131,243
Others	—		262	16,119
Total	4,477	180,188 C 6	10,951	468,867
Exports.				
Aust. Territories	†	7	108	7,138
New Zealand	85	6,500	85	6,500
N.Z. Dependencies	—	—	96	1,364
Others	3	130	18	1,038
	88	6,667	307	16,040

Producers.

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

CEMENT — PORTLAND.

Imports of cement to the end of the third quarter were at the rate of 168,000 tons annually. This rate is more than 100% below that of 1951, when 375,000 tons were imported. This decline may be attributed to the cessation of large construction programmes.

Annual domestic production should be icreased shortly by 25,000 tons with the opening up of a cement works at Port Fairy, Victoria.

	Quarter ended 30/9/52.		Nine Months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	325,700		970,600	
Imports.				
United Kingdom	25,059	183,536	89,234	628,917
Sweden	2,974	19,926	17,445	109,356
Japan	8,228	93,671	10,427	123,826
China	—	—	2,027	20,405
Fed. Rep. Germany	194	2,016	1,359	15,118
Others	392	4,662	6,109	70,744
Total	36,847	303,811	126,601	968,366
Exports.				
Papua/New Guinea	436	6,073	783	9,739
Fiji	615	6,029	1,464	15,489
Others	1,079	13,270	2,018	31,057
Total	2,130	25,372	4,265	56,285

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., Maldon, N.S.W.
Queensland Cement and Lime Co. Ltd., Darra, Queensland.
Southern Portland Cement Ltd., Berrima, N.S.W.
Standard Portland Cement Co. 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.

During the third quarter, 1952, production of chromite has been recorded at Coobina, Western Australia; the grade of the ore was reported to be 46% Cr_2O_3. Production of low-grade ore in Queensland is reported on a yearly basis.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	773		773	
Imports.				
Chrome Ore.				
U.K.	—	—	2	568
New Caledonia	2,180	28,436	4,734	59,572
Union of South Africa	504	5,865	1,507	14,391
Total	2,684	34,301	6,243	74,531
Ferro-chrome.				
Country of origin not available	349	86,749	781	175,565

CLAYS.

The compilation of clay production statistics has been hampered by the lack of a satisfactory classification, and until more detailed information is known about individual deposits a classification based mainly on use will necessarily have to be adopted.

Australian Industrial Minerals N.L. have not notified any change in the price of bagged kaolin, which has stood at £13/13/- per ton, f.o.b. Port Adelaide, since March, 1952.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production.				
Kaolin	2,794(i)		6,988(i)	
Other	330,824(i)		1,027,457(i)	
Total	333,618(i)		1,034,445(i)	
Imports.				
Ball Clay				
United Kingdom	30	294	326	2,507
Fire Clay				
United Kingdom	76	1,587	295	6,425
China Clay (Kaolin).				
United Kingdom	—	—	563	7,789
United States	—	—	†	12
Total	—	—	563	7,801
Clay n.e.i.				
United Kingdom	35	1,627	122	3,433
United States	103	4,263	202	6,950
Other	56	688	148	2,637
Total	194	6,578	472	13,020
Exports.				
New Zealand	174	5,005	359	10,564
Others	5	154	50	822
Total	179	5,159	409	11,386

COAL — BLACK.

Western Australia was the only State which did not produce more coal in the third quarter than in the second quarter. Production from this State was hampered by a prolonged metal trades strike which closed the State's railways. The Australian output was some 450,000 tons above the second quarter output at 5,275,103 tons.

The Commonwealth Government has authorised a coal stockpiling programme and has provided funds to enable a stock of up to 1½ million tons to be built, if necessary. The stockpile was estimated to be 850,000 tons at the beginning of December. Several mines producing low-grade coal have been closed and the miners transferred to other collieries.

Diamond drilling in the north-east basin of the Collie coal field in Western Australia has located a total of 63 feet of coal at 380 feet. Five seams were found, the largest being 37 feet thick. Average thickness of the seams on this field is of the order of 12 feet.

	Quarter ended 30/9/52. Tons.	£.	Nine months ended 30/9/52. Tons.	£.
Production.				
Queensland	765,779		2,065,231	
New South Wales	4,117,761		11,270,970	
Victoria	43,218		104,452	
Tasmania	72,120		191,089	
South Australia	125,868		335,110*	
Western Australia	150,357		597,481	
Total	5,275,103		14,564,333*	
Imports.				
India	103,330	332,976	135,976	462,111
Canada	—	—	50,480	153,157
Other Countries	—	—	63,767	212,787
	103,330	332,976	250,223	828,055
Exports.				
Fiji	8,958	44,724	14,502	71,750
New Caledonia	19,658	98,290	71,673	353,886
Other Countries	13,613	55,186	26,991	106,773
	42,229	198,200	113,166	532,409

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, Lithgow, 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.

The record production rate established during the first half of 1952 was maintained during the third quarter and it is probable that the output for 1952 will exceed 8 million tons for the first time.

At present, foundations are being laid for the Lurgi plant at Morwell. The initial plant will consist of six Lurgi pressure generators, two air liquefaction plants, one benzol recovery and refinery plant and a tar distillation plant for the treatment of a million gallons of brown coal tar annually.

	Quarter ended 30/9/52. Tons.	Nine months ended 30/9/52. Tons.
Production	2,100,538	6,161,101

Producers.

State Electricity Commission, 22 William Street, Melbourne (mines at Yallourn).
Maddingley Brown Coal Pty. Ltd., 411 Collins Street, Melbourne (mine at Bacchus Marsh).
Globrite Brown Coal Mine, Post Office, Deans Marsh, Vic.
Lignite N.L., 411 Collins Street, Melbourne (mine at Bacchus Marsh).
Moolamoona Brown Coal Mine, Post Office, Thorpdale, Victoria.
Star Collieries, 22 Mt. Alexander Road, Flemington, Vic. (mine at Bacchus Marsh).
Winchelsea Coal Pty. Ltd., 22 Dynon Road, South Kensington (mine at Wensley Bray via Winchelsea).
Sunshine Fuel and Brown Coal Co., 65 Geelong Road, Ballarat East, Vic. (mine at Bacchus Marsh).

COBALT.

Cobalt oxide is recovered at the Electrolytic Zinc Company's works at Risdon, Tasmania. Most of the cobalt recovered is contained in zinc concentrates from Broken Hill. The domestic price of black cobalt oxide is quoted at 10/- per pound.

	Quarter ended 30/9/52. Tons.	£.	Nine Months ended 30/9/52. Tons.	£.
Production.				
Cobalt oxide	3.69		12.78	
Cobalt content	2.35		8.15	
Imports.	Not recorded separately.			

Principal Producers.

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

COPPER.

With improved coke supplies, Mt. Lyell Mining and Railway Company has been able to smelt a considerable proportion of its accumulated copper concentrate. This accounts in part for the increase in the output of blister and refined copper. Some concentrates from stock were also shipped to Port Kembla for treatment in 1952. Mt. Isa Mines started up the copper smelting plant at the beginning of February, 1953.

The International Materials Conference will cease to allocate copper as from 16th February, 1953. The supply and demand are now in balance and any need for allocation of supplies according to requirements has passed, but the Committee will keep the position under review for some time.

The export of copper ore, concentrate, blister or refined copper, semi-manufactured shapes and scrap is controlled, export may be permitted in certain circumstances.

Price. In February, 1953, the domestic price remains unchanged at £350 per ton. There has been no change in the controlled price (£stg.285) in the United Kingdom nor is there any indication of dealing in copper passing to the London Metal Exchange. There has been no change in the pricing arrangement in the United States.

	Quarter ended 30/9/52. Tons.	£.	Nine months ended 30/9/52. Tons.	£.
Mine production.				
Copper in cons.	5,391		14,406	
Smelter production.				
Blister copper	5,196		14,321	
Refined copper	3,499		12,081	
Imports.				
Blister copper and Refinery shapes.				
Belgian Congo	1,600	484,368	8,666	2,502,863
Northern Rhodesia	4,598 ~~8,645~~	1,289,153	~~11,646~~ 7,599	2,088,726
Other Countries	3,761	1,459,971	5,638	2,042,867
Total	~~14,006~~ 9,959	3,233,492	~~25,950~~ 21,903	6,634,356

Principal Producers.

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. 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.

Relatively small quantities of damourite are obtained by selective mining of a fireclay deposit at Mt. Crawford, near Warren Reservoir, S.A.—the small tonnage produced finding a ready market as a filler in linoleum, paint, plastics, etc.

The most recent price of bagged damourite, f.o.b. Port Adelaide, quoted by Australian Industrial Minerals N.L. is £10 per ton.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	n.a.		n.a.	

Producer.

Australian Industrial Minerals N.L., 55 Grenfell Street, Adelaide (lease at Mt. Crawford, S.A.).

DIATOMITE.

Although production statistics are incomplete, those to hand at the end of the third quarter of 1952 indicate that the total production for the year should be similar to that of 1951, when 8,729 tons were produced. The major production of diatomite is from New South Wales.

The selling price of first-grade diatomaceous earth, quoted by McLeod & Co., has remained unaltered at £39/10/- per ton delivered Sydney, since November, 1952.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	1,805(i)		6,098(i)	
Imports.				
United Kingdom	17	625	90	3,624
United States	33	1,163	520	14,085
Others	—	—	22	782
Total	50	1,788	632	18,491
Exports.				
New Zealand	18	665	7 ~~6~~6	3,213
Singapore	—	—	6	147
Siam	—	—	6	158
Total	18	665	~~7~~8 8	3,518

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 Gnangara, W.A.
Minerals Pty. Ltd., 318 Botany Road, Alexandria, N.S.W. (deposit at Coonabarabran).

DOLOMITE.

Production of dolomite to the end of the third quarter, 1952, indicates that the total for 1952 will greatly exceed the record production of 74,611 tons established during 1950. This increase can be attributed to the expansion of the iron and steel industry.

	Quarter ended 30/9/52.	Nine months ended 30/9/52.
	Tons.	Tons.
Production	27,291	70,806

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).
Atkinson and Giles, Mt. Magnet, W.A.
Non Metallics Ltd., 74 Pitt Street, Sydney (deposit at Rylestone, N.S.W.).
Duck River Co. Pty. Ltd., Smithton, Tasmania.

FELSPAR.

Production of felspar in the third quarter of 1952 showed no marked improvement over that of the second quarter when 2,647 tons were produced. The production in these two quarters was approximately equal to that of the first quarter of the year.

Since November, 1952, the price of unbagged 100 and 200 mesh felspar ex works, Melbourne, has been quoted by S. N. Rodda Pty. Ltd., at £21/12/6 and £25/15/- per ton respectively.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production (a)	2,763	-	10,522	
Imports.				
United Kingdom	—	—	21	362
Norway	—	—	297	3,263
Others	—	—	10	108
Total	—	—	327	3,733
Exports.				
Singapore	250	1,250	435	2,175
New Zealand	6	136	99	2,855
Total	256	1,386	534	5,030

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.

(a) Includes Cornish Stone and China Stone.

FLUORSPAR.

Selling prices of fluorspar were increased by £1 per ton to offset the higher freight charges between the mines in North Queensland the principal market in Sydney, and Australian fluorspar can no longer face competition from imported material of similar quality. Production during the third quarter, 1952, was slightly higher than in the previous period, but no substantial and permanent improvement can be expected unless sources of supply are developed nearer the principal market.

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

Buying.
90% CaF_2—£11/2/6 per ton f.o.r. Mungana, Q.
85% CaF_2—£9/17/6 per ton f.o.r. Mungana, Q.
In each case plus 2/6 per unit above 85% or 90%.

Selling.
90% CaF_2—£23/17/6 per ton delivered Sydney.
85% CaF_2—£22/7/6 per ton delivered Sydney.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	19		25	
Imports.				
U.K.	2	72	172	3,382
Fed. Rep. of Germany	50	1,464	324	7,417
Union of South Africa	—	—	211	2,407
Total	52	1,536	707	13,206

Producers.

Prospectors and Syndicates in the Mungana-Chillagoe district, Queensland.

FULLER'S EARTH.

There was no production of fuller's earth recorded in New South Wales or Western Australia during the third quarter, 1952.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	—	—	64	—
Imports.				
United Kingdom	2	84	3	97
Others	†	29	†	29
	3	113	4	126

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

GLASS SAND.

Statistics relating to the production of glass sand in Australia are far from complete.

	Quarter ended 30/9/52.	Nine months ended 30/9/52.
	Tons.	Tons.
Production.		
Western Australia	2,077	5,810
Other States	n.a.	n.a.

Producers.
Australian Glass Manufacturers Co. Pty. Ltd., 420 Spencer Street, Melbourne (leases at Lake Gnangara, W.A., and supplies obtained also in N.S.W., Vic. and S.A.).
W. M. and R. J. Leach, Lake Gnangara, W.A.
Australian Glass Manufacturers Co. Pty. Ltd., P.O. Box 1, Waterloo, N.S.W. (leases at Rosebery, N.S.W.).

GLAUCONITE.

The production rate of glauconite at Gin Gin, Western Australia, to the end of the third quarter, 1952, was considerably below that for 1951, when 506 tons were produced.

	Quarter ended 30/9/52.	Nine months ended 30/9/52.
	Tons.	Tons.
Production	27	176

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

GOLD.

The output of gold in the third quarter, 1952, was slightly less than in the second quarter, but the total for the first three quarters of 1952 is about 43,000 ounces greater than for the same period in 1951. A preliminary estimate for 1952 indicates that mine production will be about 100,000 ounces greater than for the previous year; this is due to a large increase in Western Australia during the fourth quarter of the year. Central Norseman Gold Mine and New Coolgardie Gold Mine have been responsible for a considerable proportion of the increased output in Western Australia. There has also been some production from Great Western Consolidated Gold Mine, the mill has been running on low grade ore until all adjustments are made. A portion of the increase in output of gold in the Kalgoorlie district may be due to the necessity of mining higher grade ore to combat rising costs.

The average price per fine ounce received for newly-mined gold sold on the open market, c.i.f. Paris was as follows:—September, £16/13/7; October, £16/13/4; November, £16/11/6; December, £16/10/9; January, 1952, £16/18/2.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
Mine Production.	Fine oz.	£.	Fine oz.	£.
Queensland	17,940		62,184	
New South Wales	11,601		30,729	
Victoria	16,544		47,484	
Tasmania	4,279		11,976	
South Australia	163		299	
Western Australia	178,459		514,458	
Northern Territory	10,541		32,455	
Total	239,527		699,585	
Territory of New Guinea ..	35,155		96,881	
Imports.				
Bar, dust, etc.				
Papua and New Guinea ..	33,115	511,791	111,327	1,712,374
New Zealand	8,885	137,641	50,421	772,391
Other Countries	16,155	265,351	58,540	937,696
	58,155	914,783	220,288	3,422,461
Exports.				
Bar, dust, etc.				
U.K.	64,534	1,049,706	69,770	1,136,767
France	177,881	2,884,056	434,726	7,150,444
Netherlands	98,739	1,483,163	112,425	1,709,762
Switzerland	—	—	140,866	2,409,140
Other Countries	16	298	16	298
	341,170	5,417,233	757,803	12,406,411

GRAPHITE.

The small production of amorphous graphite from the only operating mine—at Jacks Creek, via Collinsville—satisfies only a fraction of Australian requirements. Deposits of flake graphite in South Australia have not been worked for some time, but efforts have been made to obtain the finance necessary to instal milling equipment.

McLeod & Co. quote a selling price of £82 per ton for first-grade amorphous graphite, delivered in Sydney.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	13		66	
Imports.				
Flake.				
U.K.	—	—	18	2,355
Madagascar	—	—	152	12,263
Other Countries	†	104	†	152
Total				
Crystalline.				
U.K.	—	—	19	2,074
Ceylon	5	245	30	1,537
Other Countries	1	128	98	7,430
Total	6	373	147	11,041
Amorphous.				
U.K.	5	453	40	4,573
Ceylon	47	2,438	324	20,610
Madagascar	—	—	100	7,897
Other Countries	3	527	63	3,016
Total	55	3,418	527	36,096
Exports.				
New Zealand	5	422	32	2,331
Other Countries	†	52	†	98
	5	474	32	2,429

Producer.
T. C. and M. E. Sanson, Jacks Creek, via Collinsville, Queensland.

GYPSUM.

The record rate of production established in 1951 was not maintained during 1952, but output continued at a high level. Exports have increased slightly by comparison with 1951, and apparent consumption within Australia has consequently fallen to some extent.

As from August, 1952, the Colonial Sugar Refining Co. Ltd. quote a selling price of £1/18/- per ton, f.o.r Conoble or Manara, N.S.W.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	86,429		269,084	
Imports	—	—	7	121
Exports.				
New Zealand	3,850	4,639	21,623	32,266

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.

Following the blowing in of the new 1,500 tons per day blast furnace at Port Kembla towards the end of August, the output of iron and steel in Australia has reached record figures. The output for the third quarter was 405,900 tons of pig iron (309,500 tons in the second quarter), and 452,400 tons (309,900 tons) of steel ingots. There was a corresponding increase in the iron ore output, particularly from Yampi Sound. Iron ore from this source is being shipped to all Australian steelworks.

The domestic demand for pig iron has fallen considerably as deflationary measures have become effective, and several thousands of tons of pig iron are stacked at the charcoal iron works at Wundowie, Western Australia. Overseas markets for this pig iron, which is suitable for the production of nodular graphite iron, are being investigated.

	Quarter ended 30/9/52.		Nne months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production.				
Iron Ore.				
S.A.	743,100		1,959,175	
W.A.	42,232		96,346	
Total	785,332		2,055,521	
Iron Oxide.				
N.S.W.	2,840		11,616	
Tasmania	1,035		10,509	
S.A.	n.a.		n.a.	
Pig Iron	405,900		1,092,700	
Ingot steel	452,400		1,168,600	
Imports.				
Pig Iron	—		6,231*	236,912*
Ferro Alloys	42	30,147	871	115,015
Steel	6,762	659,591	91,096*	6,701,486*
Tin and Terne Plate	29,860	3,061,468	133,604*	12,516,061*
Exports.				
Pig Iron	3,815	77,365	12,872	209,200
Steel	3,056	146,834	7,370	286,546*

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.

LEAD.

Domestic mine production of lead in concentrate during the third quarter, 1952, showed a considerable increase in comparison with the two previous quarters. It is probable that the output for 1952 will be of the same order as that in 1950, 225,000 tons. Output in Western Australia is increasing rapidly and may reach 6,000 tons for the year in comparison with 1,912 tons during 1951. The mines being developed by the Anglo-Westralian Mining Pty. Ltd. and the Wheel of Fortune Extended, have supplied a considerable proportion of the increased output. The lodes at these mines average 4 to 5 feet in width and assay 15 to 25% lead. The mill at Anglo-Westralian's mine at Protheroe, north-east of Geraldton, is capable of handling 3,000 tons of ore per month.

The quantity of pig lead exported during 1952 at 141,431 tons was 35,000 tons in excess of exports during 1951. Increased exports were not only due to a considerable fall in domestic consumption but also to the movement of stocks held by the U.K. Ministry of Materials. There were 31,413 tons of lead bullion exported, slightly less than the previous year, and lead concentrate increased from 27,811 tons in 1951 to 38,134 tons in 1952.

The export of pig lead and manufactured lead products is controlled. Control is also exercised on the export of scrap lead, alloy scrap containing lead and secondary lead residues.

Price. There has been no alteration in the controlled price of lead for domestic consumption. On the London Metal Exchange the price has been variable, firming from £stg.93 at the beginning of December to £stg.108 at the end of that month. This increase was attributed to the strike at the smelters at Port Pirie; this strike was settled at the end of January, 1953. The price was somewhat easier during January, 1953, and varied between the range £stg.104-97. Price movements in the U.S.A. were in line with those in London and the price at the close of January was 14 cents per pound. The fall in price during the last quarter of 1952 has brought about the closure of many high-cost producers in U.S.A. The effect of this on production for the year may be appreciable. At the close of February, 1953, prices were as follows: U.K., £stg.93 per ton; U.S., 13.5c. per lb.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Mine production.				
Lead in cons.	64,864		169,268	
Smelter production.				
Refined lead	48,071		118,838	
Lead in bullion	9,493		28,196	
Exports—Lead cons.				
Belgium	1,985	245,143	9,803	893,366
U.S.A.	2,338	189,626	12,951	1,191,333
Other countries	280	19,555	1,047	72,302
Total	4,603	454,324	23,801	2,157,001
Lead Bullion.				
U.K.	15,382	2,810,243	5,439	1,097,919
Refined Lead.				
U.K.	4,602	836,758	28,563	5,407,013
U.S.A.	28,504	4,191,622	57,998	9,578,814
Other Countries	860	129,624	6,231	1,243,821
	33,966	5,158,004	92,792	16,229,648

These are figures for 1st 6 months.

Principal Producers.

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 Australia 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.

The expansion of the iron and steel, cement and chemical industries in Australia has resulted in an increased demand for limestone. Statistics to hand indicate that this demand is being satisfied.

	Quarter ended 30/9/52. Tons.	Nine months ended 30/9/52. Tons.
Production	675,433(i)	1,919,722(i)

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, Quoiba, Tasmania (lease at Melrose).

MAGNESITE AND CALCINED MAGNESITE.

The continued expansion of the Australian iron and steel industry is reflected in the increased production of magnesite for refractory purposes. Statistics to hand at the end of the third quarter, 1952, indicate that the production for 1952 will be considerably in advance of the 39,000 tons produced in 1951.

	Quarter ended 30/9/52. Tons.	£.	Nine months ended 30/9/52. Tons.	£.
Production	9,479		35,880	
Imports.				
United Kingdom	—	—	686	7,353
United States	—	—	16	671
Others	—	—	69	2,369
Total	—	—	771	10,393
Exports.				
New Zealand	2	157	84	4,089
Others	3	392	3	442
Total	5	549	87	4,531

Producers.

Scahill 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 Thuddungra, N.S.W.).

MANGANESE.

In order to encourage the testing of manganese deposits near Peak Hill and Marble Bar, Western Australia, permission has been given to export 12-14,000 tons of manganese ore. The total amount to be exported has been divided into two parcels, one from each locality named.

The export of manganese ore is controlled in order to conserve the known resources, which at the present time are small.

	Quarter ended 30/9/52. Tons.	£.	Nine months ended 30/9/52. Tons.	£.
Production.				
Manganese Ore	2,068		5,828	
Imports.				
Manganese ore.				
Battery grade	—	—	36	540
Manganese oxide powder	†	4	12	1,253

Principal Producers.

Westralian Ores Pty. Ltd., Peak Hill, Western Australia.
Broken Hill Pty. Co. Ltd., Peak Hill, Western Australia.

MICA.

Purchases by the Mica Pool in December, 1952, amounted to 28,748 lbs., valued at £35,339, raising the total purchases for the year to 65,298 lbs., compared with 51,556 lbs. in 1951.

The Australian demand for mica has been weakening and turnover in small sizes is very slow.

The Commonwealth Tariff Board is holding a public inquiry to determine whether assistance should be accorded to the production and processing of mica in Australia, and, if assistance is considered desirable, the form it should take. The inquiry opens in Melbourne on 2nd March, 1953, and in Sydney on 23rd March.

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.

It was announced in December, 1952, that the Indian Government is considering a further ban on the export of scrap mica for a period of two or three years. An Indian journal stated that the ban is intended to hinder the production of built-up mica products from scrap (Samica foil, Micamat, etc.), as these products are in competition with micanite made from Indian splittings.

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. Buying.	CLEAR. Selling.	COMMERCIAL CLEAR. Buying.	COMMERCIAL CLEAR. Selling.	STAINED. Buying.	STAINED. 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	100/-	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 to December, 1952, 65,298 lbs.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	lbs.	£.	lbs.	£.
Imports.				
Block	5,274	8,056	14,906	21,164
Splittings	12,500	644	51,270	7,061
Scrap	—	—	73,160	876
Ground	—	—	24,592	652
Micanite	—	—	7,627	6,230
Exports.				
Block	4,090	202	4,105	247
Scrap	—	—	34,100	190
Micanite	—	—	—	—

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 Mica Store is situated in Warburton Lane, Melbourne, and is conducted by the Bureau of Mineral Resources as agent for Department of Supply. The buyer visits Alice Springs in April, August and December.

The Commonwealth Government has decided to retain the Pool until the end of 1953.

MINERAL PIGMENTS.

Domestic production of mineral pigments to the end of the third quarter, 1952, shows a marked decrease in comparison with the production attained during the first three quarters of 1951, when 1,028 tons were produced.

The selling price of pigments quoted by McLeod & Co. are:—

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

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production.				
Red	5		285	
Yellow	14		98	
Umber	—		12	
	19		376	
Imports.	145	6,120	1,660	110,211

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, Spalford, Tasmania.
R. J. Smith, Opthalmia 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.

Although it is understood that a price considerably higher than that overseas was offered for domestic molybdenite, there was no production recorded during the third quarter of 1952. Domestic consumption of molybdic oxide in trace element fertilisers is estimated at 7-8 tons of concentrate containing 90% MoS_2 per year.

Molybdenum is still under allocation by the I.M.C.

Price. The price of molybdenite concentrate in the U.K. was reduced to stg.103/10½ per unit, c.i.f. U.K. ports. The U.S. price is unchanged at $1 per lb. of contained molybdenum.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Cwt.	£.	Cwt.	£.
Production.				
Molybdenite cons.	—		3	

NICKEL.

There is no production of nickel in Australia.

Nickel is still under allocation by the I.M.C.; Australian allocation for the first quarter, 1953, is 152.8 metric tons of primary metal and metal in oxides.

Nickel producers in Canada have increased the base price by 3½ cents to 60 cents per pound to be effective from 14th January, 1953. The U.K. price of refined nickel will increase from £stg.454 to £stg.483 per ton. In the U.S. prices have been increased by 3½ cents per pound.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Imports.				
Pigs, ingots, bars, etc.				
U.K.	111	67,821	400	232,781
Canada	22	4,966	32	13,088
Other Countries	†	467	1	791
Total	133	73,254	433	246,660

PLATINUM AND PLATINUM GROUP METALS.

There is little to report on these metals. A small quantity of osmiridium was produced at Adamsfield, Tasmania, but no production of platinum was recorded.

World supplies of platinum group metals appear to be improving, and there have been some price falls. Latest U.K. and U.S. prices per ounce are:—

Platinum: £stg.£27 to £33¼, $90 to $93.
Palladium: £stg.8½, $23 to $24.
Rhodium: £stg.40 to £45, $125.
Ruthenium: £stg.20 to £25, $90 to $93.
Iridium: £stg.60 nom., $175 to $185.
Osmium: £stg.50 nom., $200 to $210 nom.
Osmiridium: Nom., Nom.

Platinum.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	oz. fine	£.	oz. fine	£.
Production	—		—	
Imports.				
U.K.	2	65	239	~~3~~8,803
Hong Kong	—	—	132	4,750
	2	65	371	~~8~~13,553

Platinum and Platinum Group Metals.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
Production.				
Osmiridium Cons. Tas.	10.7		40.46	
Imports.				
U.K.	—		136	1,487
Exports.				
U.K.	210	8,868	550	23,754

POTASH.

There is no production of potash salts in Australia and relatively large quantities have to be imported.

The price of fertilizer grade potash has remained unchanged in Victoria since January, 1952, when it was fixed at £41/15/- per ton, f.o.b. Yarraville or North Geelong — in buyer's own bags a discount of £3/3/6 is allowed. A cash discount of 5/- per ton is allowed to the purchaser.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£A.	Tons.	£.
Imports—Fertilizer Grade Chloride.				
France	1,770	40,071	12,447	296,675
Fed. Rep. Germany	—	—	850	19,223
Others	—	—	201	3,588
Total	1,770	40,071	13,498	319,486
Sulphate	18	5,108	693	21,385
Chemical Grade	263	33,830	1,691	227,867

QUARTZITE.

Production of quartzite for use in the manufacture of ferro-silicon in N.S.W. amounted to 3,229 tons in the third quarter, 1952. Complete production statistics for quartzite used for other purposes are not available.

	Quarter ended 30/9/52.	Nine months ended 30/9/52.
	Tons.	Tons.
Production.		
New South Wales	3,274	8,020
Other States	n.a.	n.a.

Producers.

Newbold 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. (lease at Lithgow).

ROCK PHOSPHATE.

Small quantities of rock phosphate mined in South Australia and New South Wales are used in the metallurgical industry. Reserves are too small and are of such a grade as to make it unsuitable, compared with the imported rock, for use in the manufacture of superphosphate.

For the year commencing 1st July, 1952, the selling price of high-grade phosphate rock (Nauru, Ocean Island and Christmas Island) has been reduced from 145/- to 125/- per ton.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£.
Production	n.a.		3,054(i)	
Imports.				
Nauru	212,065	358,051	461,255	783,563
Christmas Is.	82,706	222,397	175,006	500,830
Gilbert & Ellice Is.	65,413	148,608	151,800	359,386
Others	—	—	6,397	51,361
Total	360,184	729,056	794,458	1,695,140

SALT.

Statistical information is incomplete and no estimates of quarterly production are available. Evaporating capacity is being extended in South Australia and Victoria, and the effect on production will be noted in the current harvesting season.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Tons.	£.	Tons.	£
Production	n.a.		n.a.	
Imports.				
Rock Salt.				
U.K.	185	1,159	1,128	6,231
Table salt.				
U.K.	1	75	2,180	91,820
Other Countries	—	—	†	7
Total	1	75	2,180	91,827
Dairy Salt.				
U.K.	—	—	204	1,176
Salt n.e.i.				
U.K.	526	2,873	1,601	11,900
Other Countries	1	25	1	32
Total	527	2,898	1,602	11,932
Exports.				
Rock Salt.				
New Guinea	—	—	2	24
Other Countries	—	—	1,550	6,228
Total	—	—	1,552	6,252
Table Salt.				
New Guinea	35	665	89	1,705
New Zealand	3,878	18,785	6,952	32,843
Other Countries	85	1,493	243	3,127
Total	3,998	20,943	7,284	37,675
Salt n.e.i.				
New Guinea	28	433	165	2,455
New Zealand	3,061	17,086	9,401	49,617
Fiji	94	1,065	288	3,247
Other Countries	20	253	69	1,668
Total	3,203	18,837	9,923	56,987

Principal Producers.

Bowen Salt Ltd., P.O. Box 62, Bowen, Queensland.

Cheetham Salt Pty. Ltd., Box 272, Geelong, Vic. (evaporating pans at Geelong and Laverton).

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.

There was no recorded production of serpentine in the third quarter of 1952. Relatively small tonnages are obtained from the Tamworth district, N.S.W., for use in the manufacture of refractory bricks.

	Quarter ended 30/9/52.	Nine months ended 30/9/52.
	Tons.	Tons.
Production	—	175

SILLIMANITE.

Production for the third quarter, 1952, was considerably lower than in the first and second quarters, but the total for the nine months ended 30th September, 1952, was greater than for the whole of 1951.

No massive sillimanite is exported, and the export figures quoted hereunder refer to a kaolinised (partly decomposed) sillimanite not included in the production statistics.

Selling price quoted by Australian Industrial Minerals N.L. for South Australian sillimanite, September, 1952, is £10/4/- per ton, f.o.b. Port Adelaide. Thackaringa Sydnicate has advanced the price of Thackaringa sillimanite to £6/5/- per ton, f.o.r. Broken Hill.

	Quarter ended 30/9/52		Nine months ended 30/9/52	
	Tons	£	Tons	£
Production	175		909	
Imports.				
India	3	161	18	761
Exports.				
Japan	—	—	101	831

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.

Mine production for the third quarter, 1952, showed an appreciable increase in comparison with the earlier quarters of the year, and the production for 1952 may exceed 11 million ounces. The increase is principally due to improved output of lead and zinc concentrates in New South Wales.

Price. Owing to tightness of supplies that developed early in January, 1953, from usual sources in the United States, the local price was increased from 83.25 cents to 85.25 cents per ounce. The price advanced to stg.6/2 from 6/1 per fine ounce in the United Kingdom.

	Quarter ended 30/9/52.		Nine months ended 30/9/52.	
	Oz. fine	£	Oz. fine	£
Production.				
Mine	3,171,041		8,539,285*	
Refined silver	1,824,431		4,998,565*	
Imports.				
New Guinea	15,800	5,742	44,556	16,750
Fiji	6,609	2,508	43,398	16,484
Other Countries	3,964	1,420	6,573	2,408
Total	26,373	9,670	94,527	35,642
Exports.				
U.K.	1,563,656	586,748	4,186,552	1,603,897
Hong Kong	—		49,262	18,986
	1,563,656	586,748	4,235,814	1,622,883

These figures do not include the silver content of lead bullion and other concentrates exported.

Principal Producers.

Lead-zinc mines at 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 Sulphur Committee of the International Materials Conference has announced that the Australian allocation of sulphur for the first quarter of 1953 is 37,500 tons, of which 32,000 tons has been allocated from American sources.

The Phosphate Co-operative Co. of Aust. Ltd., Geelong, have announced the arrival of a shipment of pyrite concentrates from Mt. Morgan for use in sulphuric acid manufacture. This company had, since 1947, been operating exclusively on imported sulphur.

Price. The Pool price of sulphur fixed at £25 per ton on 1st July, 1952, has not been subject to any alteration.

	Quarter ended 30/9/52.			Nine months ended 30/9/52.		
	Tons	S. content.	£.	Tons	S. content.	£
Production.						
Pyritic cons.	52,844	25,278		141,191	67,732	
Pyritic ore	2,873	921		6,444	2,065	
Total	55,717	26,199		147,635	69,797	
Zinc cons (a)	23,533	7,550		n.a.	n.a.	
Imports.						
Sulphur.						
United States	24,102	24,102	312,096	62,476	62,476	767,785
Japan	4,164	4,164	196,922	4,164	4,164	196,922
	28,266	28,266	509,018	66,640	66,640	964,707

(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.

Statistics to hand at the end of the third quarter, 1952, indicate that the production of superphosphate for 1952, will be approximately the same as in 1951, viz. 1,590,000 tons.

Prices Commissioners in the various States have approved the following nett cash prices for superphosphate:—

Queensland—272/9, per ton, ex works, in new jute bags.
New South Wales—300/6 per ton, ex works, in new jute bags (pool price).
Victoria—285/-, per ton, ex works, in new jute bags.
Tasmania—242/-, per ton, at users' nearest railway siding.
South Australia—288/6, per ton, ex works, in new jute bags.
Eyre Peninsula—292/6, per ton, ex works, in new jute bags.
Western Australia—318/-, per ton, ex works, in new jute bags.

	Quarter ended 30/9/52. Tons.	£	Nine months ended 30/9/52. Tons.	£
Production	360,400		1,188,300	
Exports.				
New Guinea and Aust. Territories	3	51	15	263
Other British Countries	1,080	22,822	1,080	22,822
Total	1,083	22,873	1,095	23,085

TALC.

The production of talc to the end of the third quarter, 1952, was slightly in advance of production recorded at the end of the corresponding period in 1951, when 5,579 tons had been produced.

Since November, 1952, the price of first and third grade talc has been quoted by McLeod & Co. at £36/10/- and £20 per ton respectively.

	Quarter ended 30/9/52. Tons.	£	Nine months ended 30/9/52. Tons.	£
Production.				
Talc and Soapstone	1,314		6,007	
Pyrophyllite	21		96	
Total	1,335		6,103	
Imports.				
French Chalk and Steatite preparations				
India	†	11	31	643
United Kingdom	—	—	9	373
Italy	5	118	14	[illegible]
Others	—	—	6	419
	5	129	60	1,813
Exports.				
French Chalk and Steatite Preparations.				
Papua	—	—	1	26

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. Fitton and Gumeracha, S.A.).
Other producing centres are at Tumby Bay and Lobethal, S.A., and Wallenbeen, South Gundagai, Mudgee, Cobargo, N.S.W.

TANTALUM AND COLUMBIUM.

There was a consistent decline in the output of tantalite and columbite during the first three quarters of 1952, according to the data recorded by the Departments of Mines. The price being offered for mixed tantalite-columbite concentrate is very favourable, stg.640/- a unit c.i.f. U.K. ports, and should be conducive to some production, however small, by working parties. It has been reported that the new Administration in the United States will either eliminate or considerably reduce the bonus being paid for these mixed concentrates, but there has been no confirmation or denial of this report, and there may be few grounds for it. Any reduction of the bonus paid by the United States will cause a drop in the U.K. price.

	Quarter ended 30/9/52. lbs.	$Ta_2O_5+Nb_2O_5$ content.	Nine months ended 30/9/52. lbs.	$Ta_2O_5+Nb_2O_5$ content.
Production.				
W.A. (a)	2,442	1,724	8,126	4,990
(b)	—	—	6,373	4,649
Total	2,442	1,724	14,499	9,639

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

	Cwt.	£	Cwt.	£
Exports.				
U.K.	13	1,128	38	2,327

Principal Producers.

Amalgamated Tin Ltd., Greenbushes, Western Australia.

TIN.

Production of smelted tin for the year 1952 was 1,700 tons, an increase of 241 tons over that in 1951. By early 1953, domestic stocks were sufficiently reduced and importation was resumed. Output of tin in concentrate at 382 tons for the third quarter of the year was rather lower, but this was to be expected as Tableland Tin closed its dredge in July for removal to a new site; it has been reported that dredging will be resumed about the middle of 1953. The next meeting of the International Tin Study Group will be held in London in March, 1953.

The export of tin concentrates and smelted tin is controlled; control of export also applies to primary and secondary residues and to alloy scrap containing appreciable percentages of tin.

During the latter portion of 1952, the Minister for National Development met a delegation from the Tin Producers' Association, when prices and export control of tin and tin concentrates were discussed. The Minister also had a similar discussion with representatives of the two smelters. It was agreed that the Tin Producers' Association and the smelters would jointly prepare a case for presentation to the Prices Ministers, asking for price decontrol.

Price. The controlled domestic price of concentrate to the producer (£1,100 per ton of tin content) and refined tin to the consumer (£1,150 per ton) remains unchanged. On the London Metal Exchange there has been little change, at the close of January, 1953, the price was £stg 965 per ton. In New York the R.F.C. and the outside market quotations were 121.50 cents for spot delivery.

	Quarter ended 30/9/52. Tons.	£	Nine months ended 30/9/52. Tons.	£
Mine Production.				
Tin in cons.	382		1,209	
Smelter Production	443		1,247	
Imports.				
Malaya	—		175	207,714
Other Countries	—		5	6,621
Total			180	213,925
Exports Tin cons.				
Malaya	9	7,597	29	21,363
Tin metal.				
U.K.	356	407,469	436	500,418
Other Countries	†	33	†	158
Total	356	407,502	436	500,576

Principal Producers.

Aberfoyle Tin N.L., Rossarden, Tasmania.

Smelters.

Sydney Smelting Co.
O. T. Lempriere & Co. Ltd.
Both of Sydney, New South Wales.

TUNGSTEN.

The output of tungsten concentrates in the third quarter, 1952, showed an increase over the previous quarter, and it is probable that this increase was maintained in the fourth quarter. Total production for the year should be of the order of 1,800 tons of concentrate. The continued fall in price since the end of 1952 may discourage small and high-cost producers and the degree of activity may slacken somewhat though it is not expected that this would have much effect on total production.

As supplies of tungsten minerals have greatly increased, and actual demand has proved to be less than that estimated, the I.M.C. ceased to allocate tungsten as from the end of 1952.

Price. The U.K. Ministry of Materials reduced the price of wolfram to stg.370/- and scheelite to stg.360/- per unit on 30th December, 1952, and there was a further reduction to stg.330/- and 320/- respectively on 2nd February, 1953. At the end of February, 1953, the Ministry of Materials withdrew their buying prices and these are now nominal. Foreign wolfram is quoted in New York at the price range $51-52 per short ton unit. Those concerns which had the foresight to arrange long term contracts with a floor price will be in a better position than others.

	Quarter ended 30/9/52. Tons	£	Nine months ended 30/9/52. Tons.	£
Production.				
Scheelite Concs. (65% WO_3)	203		619	
Wolfram Concs. (65% WO_3)	288		729	
Total	491		1,348	
Units WO_3	31,870		87,563	
Metal Content, tons	252		694	
Exports.				
Scheelite Cons.				
U.K.	53	101,094	183	362,338
U.S.A.	94	137,000	471	773,600
Other Countries	4	8,610	16	30,302
Total	151	246,704	670	1,166,240
Wolfram Cons.				
U.K.	158	282,202	415	724,534
U.S.A.	36	75,781	69	155,515
Other Countries	8	15,614	136	234,485
	202	373,597	620	1,109,534
Undesignated				
U.K.	6	9,654	6	9,654
Other Countries	15	28,963	15	28,963
	21	38,617	21	38,617

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.

ZINC.

The domestic production of refined zinc for 1952 amounted to 87,448 tons, the highest yet recorded. The quantity sold to domestic users for the months October-November, 1952, was somewhat less than the rate of 15,000 tons per quarter agreed to by the producers as actual demand was less. Of the total allocated for the two months, 71% went to galvanisers, the amount represents a very considerable advance on the quantity used by that industry in 1951.

The quantity of refined zinc exported during 1952 (44,741 tons) was more than twice as much as was exported in 1951 (20,529 tons). Exports of zinc concentrate during 1952 (202,816 tons) were 66,000 tons more than in 1951.

On 2nd January, 1953, dealing in zinc was resumed on the London Metal Exchange. The closing price on that day was £stg.95/15/-; a sharper drop from the controlled price of £stg.110 had been expected.

Very considerable stocks are held by the Ministry of Materials, with contracts for supply of zinc of a further two or three years' duration. The liquidation of these stocks may later embarrass the market.

The export of refined zinc and manufactured zinc products from Australia are controlled. Control extends to zinc scrap and secondary residues of all descriptions.

Price. The controlled price for domestic consumption remained unchanged at £95. In the U.K. the controlled selling price was unchanged at £stg.110 at the end of December. On the resumption of trading by the London Metal Exchange on 2nd January, 1953, the final quotation for the day was £stg.95/15/- a ton. By the end of January the price had declined to £stg.84/10/-, and to £stg.81 at the end of February. In the United States there has been little movement; during November and December, 1952, 12½ cents per lb. was the ruling rate. This rate equivalent to £stg.86 on the open market, evidently anticipated a considerable drop on the resumption of dealing on the London Metal Exchange. However, the decline was less than expected and U.S. price was increased to 13 cents on 2nd January, and 13.25 cents on 14th January; by 23rd January, the price had fallen again to 12.5 cents. On 4th February there was a further sharp decline to 11½ cents per pound, equivalent to £stg.78 on the London Metal Exchange.

	Quarter ended 30/9/52. Tons	£.	Nine months ended 30/9/52. Tons.	£.
Mine production.				
Zinc in cons.	54,876		145,671	
Smelter production.				
Slab zinc	21,656		65,571	
Exports.				
Zinc cons.				
U.K.	52,978	2,383,312	113,979	5,384,310
Belgium	14,242	1,204,005	43,429	3,811,406
Other Countries	47	861	158	5,708
Total	67,267	3,588,178	157,566	9,201,424
Zinc slabs, etc.				
U.K.	11,610	2,123,149	30,594	6,239,967
India	1,400	214,183	2,400	520,129
Other Countries	132	21,254	1,174	240,723
Total	13,142	2,358,586	34,168	7,000,815

Principal Producers.
See "Lead."

Smelters and Refiner.
Electrolytic Zinc Co. of Australia Ltd., Risdon, Tasmania.