



AUSTRALIAN BUREAU OF STATISTICS

CANBERRA

**CENSUS OF
MINING ESTABLISHMENTS
DETAILS OF OPERATIONS
BY INDUSTRY CLASS
AUSTRALIA 1984-85**

CATALOGUE NO. 8402.0

EMBARGOED UNTIL 11.30 A.M. 12 JUNE 1986

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AUSTRALIA 1984-85**

IAN CASTLES
Australian Statistician

AUSTRALIAN BUREAU OF STATISTICS

(F)

CATALOGUE NO. 8402.0

* Commonwealth of Australia 1986

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ON VIATEL	• key *656# for selected economic, social and demographic statistics on VIATEL.

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EXPLANATORY NOTES

Introduction

This publication presents, for Australia, detailed statistics compiled from the annual census of mining establishments for 1984-85 and some comparative statistics for previous years. Publications in this series are confined to statistics such as turnover, purchases and selected expenses, wages and salaries, employment and capital expenditure and exclude details of minerals produced. The latter statistics are contained in the series *Mineral Production, Australia* (8405.0).

2. The annual mining census is conducted throughout Australia on an integrated basis with other economic censuses e.g. the annual census of manufacturing establishments and electricity and gas establishments and the periodic censuses of retail and wholesale trade establishments.

3. The period covered by the annual census is in general the twelve months ended 30 June. Where businesses find it impossible to supply information on this basis a substitute accounting period is used.

Census units

4. In accordance with the Australian Standard Industrial Classification (ASIC) the basic census unit (referred to as the 'establishment') in respect of which statistics are collected in various industry censuses is, in general, a unit covering all the operations carried on at a single physical location under the ownership of one enterprise (business). For mining censuses a mining establishment is thus one predominantly engaged in mining activities, but the data collected for it cover (subject to certain exceptions mentioned below) all activities at the location, namely:

- (a) the mining activities primary to the industry class to which the establishment is classified,
- (b) any other mining activities, i.e. production of commodities primary to another mining industry class,
- (c) any activities connected with the selling and distribution of the minerals produced,
- (d) any non-mining activities, e.g. manufacturing, construction.

The exceptions, in general, relate to locations where the subsidiary activities exceed a specified amount (currently \$4.3 million) in terms of sales and transfers out of goods and services during the year; these locations are treated for statistical purposes as two or more establishments corresponding to the various kinds of activities carried on.

5. The establishment statistics also include data relating to locations not yet in operation which are establishments classified to industry on the basis of their intended main activity, and separately located administrative offices and ancillary units serving the establishment and forming part of the enterprise which owns and operates the establishment.

Mining definition

6. The ASIC defines 'mining' as including the extraction of minerals occurring naturally as solids such as coal and ores, liquids such as crude petroleum, or gases such as natural gas, by such processes as underground mining, open-cut extraction methods, quarrying, operation of wells or evaporation pans, dredging or recovering from ore dumps or tailings. Activities such as dressing or beneficiating ores or other minerals by crushing, milling, screening, washing, flotation or other, including chemical beneficiation, processes, or in briquetting are included because they are generally carried out at or near mine sites as an integral part of mining operations. Natural gas absorption and purifying plants are also included. Excluded are establishments mainly engaged in refining or smelting of minerals or ores (other than preliminary smelting of gold), or in the manufacture of such products of mineral origin as coke, cement and fertilisers.

Mining classification

7. The structure of the ASIC comprises four levels. The broadest of these is the Division level, which relates to wide categories such as 'Manufacturing' and 'Mining'. The structure may be illustrated by the following example. A mining establishment mainly engaged in mining iron ore would be classified to:

Division B	mining
Subdivision 11	metallic minerals
Group 111	ferrous metal ores
Class 1111	iron ores

The tables in this publication are at ASIC class level except for Table 10, which contains summary data for each State or Territory.

Scope and coverage

8. Statistics in this publication relate to all establishments classified to the mining division of ASIC except for those in ASIC classes 1611 Petroleum exploration (own account), 1612 Mineral exploration, n.e.c. (own account) and 1620 Mining and exploration services n.e.c.

9. Also excluded from the collection are itinerant and part-time miners, particularly in the gemstone industry and to a lesser extent in the copper, tin and sand and gravel industries. This deficiency in coverage exists because production is usually on such a small scale that it would be difficult to establish lists of producers and obtain statistical returns. All establishments engaged in quarrying sand and gravel in Western Australia are also excluded.

Definitions of data items

10. The information shown for the various items defined below relates mainly to establishments which operated at any time during the year. Unless otherwise stated, details for establishments not yet in operation are also included.

Establishments at 30 June. The number of establishments in operation at 30 June relates to mining establishments as such. It includes mines on a care and maintenance basis if there is permanent employment but does not include the number of establishments not yet in operation and separately located administrative offices and ancillary units.

Employment. Working proprietors, and employees on the payroll, including those working at separately located administrative offices and ancillary units. Note that this publication contains statistics relating to both 'employment, average over whole year' (Table 1) and 'employment at end of June' (Table 2).

Wages and salaries. The wages and salaries of all employees of the establishment, including those working at separately located administrative offices and ancillary units. Drawings of working proprietors are excluded.

Turnover. (See also Note (a) on this page). Sales of minerals (net of coal export levy and petroleum production excise duty payments) and other goods whether produced by the establishment or not, plus transfers out of minerals and other goods to other establishments of the same enterprise, plus bounties and subsidies on production, plus all other operating revenue from outside the enterprise (such as commission, repair and service revenue and rent, leasing and hiring revenue) plus capital work done for own use, or for rental or lease. Receipts from interest, royalties, dividends and the sale of fixed tangible assets are excluded.

Stocks—Opening and closing. Stocks of materials, fuels, mine products and work-in-progress, of the establishment whether located at the establishment or elsewhere.

Total purchases, transfers in and selected expenses. (See also Note (a) on this page). Purchase of electricity, fuels, power, containers, etc. and minerals and other goods for resale, plus transfers in of goods from other establishments of the same enterprise, plus charges for processing and other commission work and payments to mining contractors, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments and rent, leasing and hiring expenses.

Value added. (See also Note (b) on this page). Turnover plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

Rent and leasing expenditure. Outlay on rent and leasing of buildings, vehicles, machinery, plant and equipment.

Fixed capital expenditure less disposals. Outlay on new and second-hand fixed tangible assets less disposals.

Note (a) Transfers to and from other establishments of the enterprise referred to in the definition of **Turnover** and **Purchases, transfers in and selected expenses** are valued, for statistical purposes, at prices commensurate with the prices which would have been received or paid if the establishments concerned had been under separate ownership, i.e. at commercial selling price.

Note (b) While *value added* is the basic measure of an industry's contribution to total production it cannot be inferred that when wages and salaries are deducted from value added, the whole of the surplus is available for profit. There are many miscellaneous expenses (such as depreciation, workers' compensation insurance, other insurance, payroll tax, income tax, rates, advertising, interest on borrowed funds, bad debts and other sundry charges) which are not taken into account in arriving at value added. Value added as calculated in this publication differs from the concept used in the National Accounts where the concept of value added also excludes some administrative expenses and sundry charges, and the change in stocks component is measured by valuing the physical change in stocks at current prices. It is not practicable in these censuses to collect data fully in accord with the National Accounts concept of value added.

Related publications

11. The following is a list of publications containing other mining and related statistics for Australia, published by the ABS or the Bureau of Mineral Resources, Geology and Geophysics (BMR). Users are also referred to the annual reports of the State Mines Departments, which contain mineral statistics.

EXPLORATION STATISTICS

Quarterly—

Mineral Exploration, Australia (8412.0)

Annual—

Mineral Exploration, Australia, 1984-85 (8407.0)

COMMODITY STATISTICS

Monthly—

Exports of Major Commodities and their Principal Markets, Australia (5403.0)

Exports, Australia (5404.0)—(\$1.20, \$2.10 incl. postage)

Imports, Australia (5406.0)—(\$1.20, \$2.10 incl. postage)

Export Price Index, Australia (6405.0)

Price Index of Metallic Materials, Australia (6410.0)

Monthly Bulletin of Metal and Mineral Prices (BMR)

Production Bulletins Nos 1-8, Australia (8357.0 to 8364.0)

Quarterly—

Australian Mineral Industry Quarterly (8403.0) (BMR)—(\$4.00 fixed price)

Quarterly Bulletin of Mineral Sands Statistics (BMR)

Quarterly Bulletin of Copper, Lead and Zinc Statistics (BMR)

Quarterly Bulletin of Tin Statistics (BMR)

Annual—

Mineral Production, Australia, 1983-84 (8405.0)

Manufacturing Commodities: Selected Principal Articles Produced, Australia, 1983-84 (Preliminary) (8365.0)

Manufacturing Commodities: Principal Articles Produced, Australia, 1982-83 and 1983-84 (8303.0)—(\$1.90, \$2.80 incl. postage)

Foreign Trade, Australia, Part 1: Exports and Imports, 1984-85 (5409.0)—(\$26.00, \$30.50 incl. postage)

INDUSTRY AND RELATED STATISTICS

Annual—

Census of Mining Establishments: Summary of Operations (Preliminary) by Industry Class, Australia, 1984-85 (8401.0)

Manufacturing Establishments: Details of Operations by Industry Class, Australia, 1983-84 (8203.0) (\$2.80, \$4.10 incl. postage)

Manufacturing Establishments: Summary of Operations by Industry Class, Australia, 1983-84 (8202.0)

Australian Mineral Industry Annual Review (BMR)

IRREGULAR

Census of Mining Establishments: Selected Items of Data Classified by Employment Size and Industry Class, Australia, 1982-83 (8410.0)

Census of Mining Establishments: Industry Concentration Statistics, Australia, 1982-83 (8411.0)

12. In addition to the publications above, more detailed information at State level is available from each State office of the ABS.

13. Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

Symbols and other usages

- nil or rounded to zero
- n.e.c. not elsewhere classified
- n.p. not available for separate publication (but included in totals where applicable)
- ASIC Australian Standard Industrial Classification.

15. Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

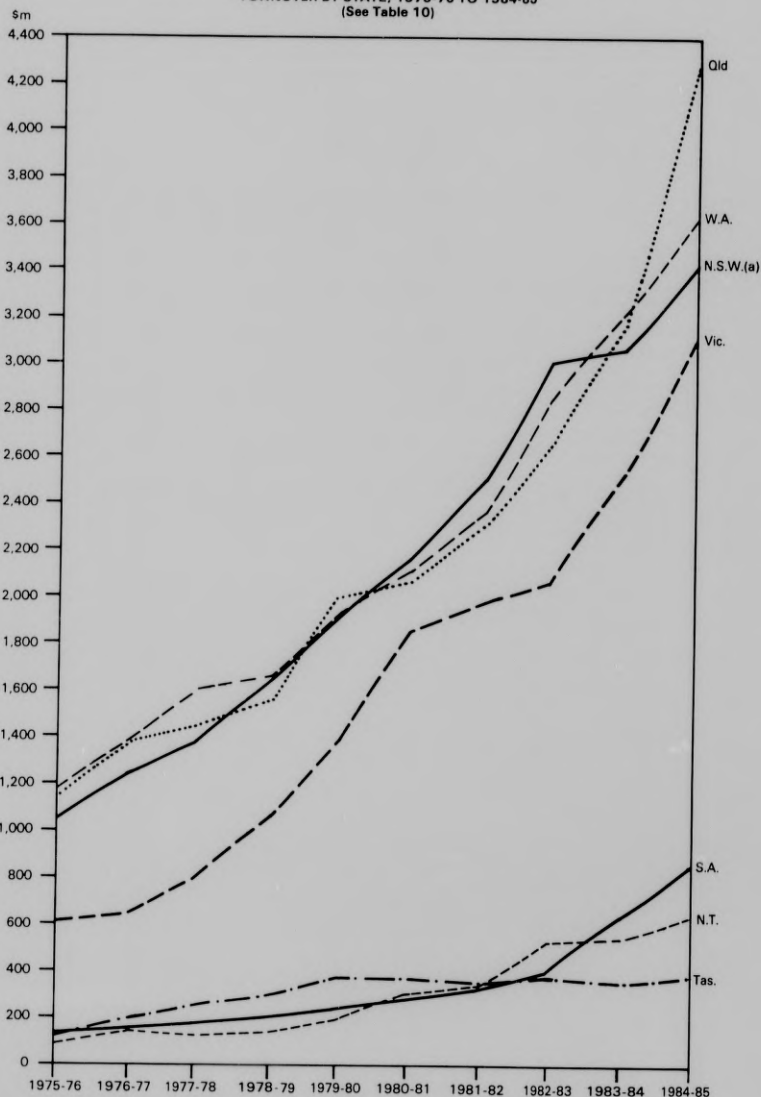
16. The figures shown in this publication have been revised where necessary and as a consequence may not agree with similar data shown in previous publications.

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CENSUS OF MINING ESTABLISHMENTS, AUSTRALIA, 1984-85

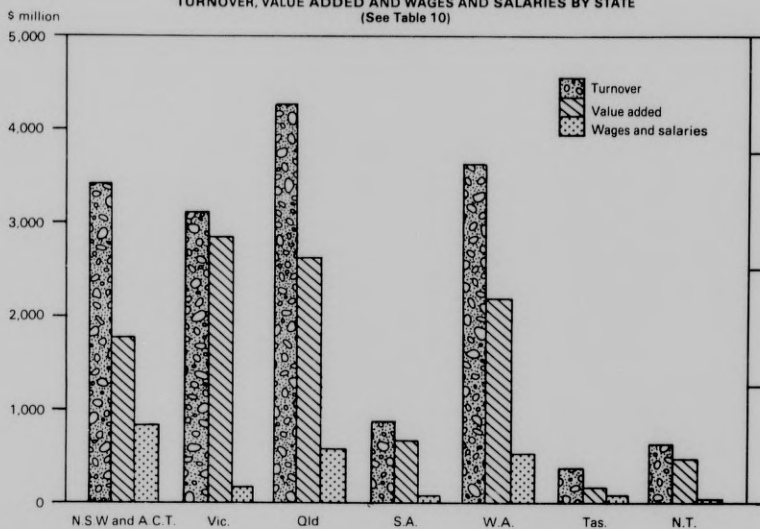
TURNOVER BY STATE, 1975-76 TO 1984-85

(See Table 10)



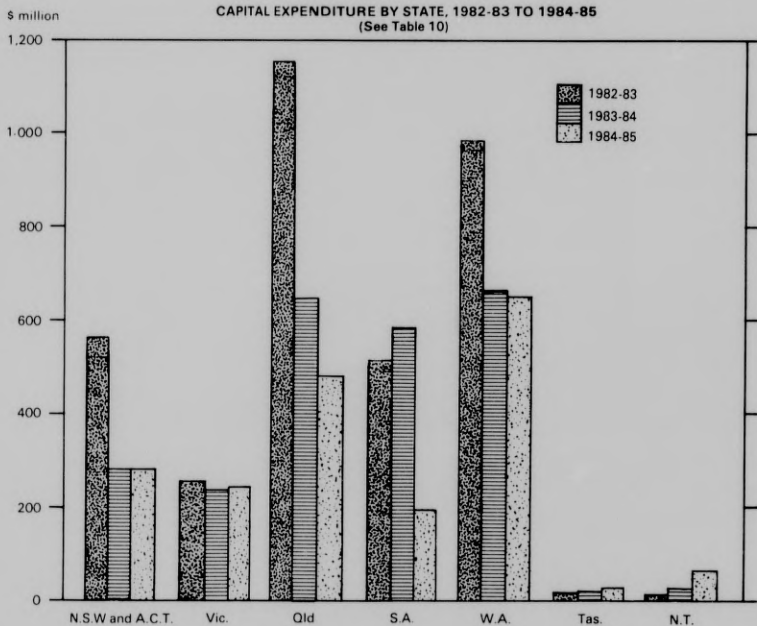
(a) Includes Australian Capital Territory.

CENSUS OF MINING ESTABLISHMENTS, AUSTRALIA, 1984-85

TURNOVER, VALUE ADDED AND WAGES AND SALARIES BY STATE
(See Table 10)

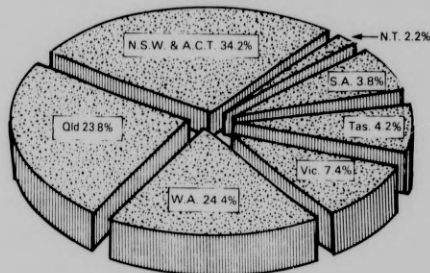
CAPITAL EXPENDITURE BY STATE, 1982-83 TO 1984-85

(See Table 10)

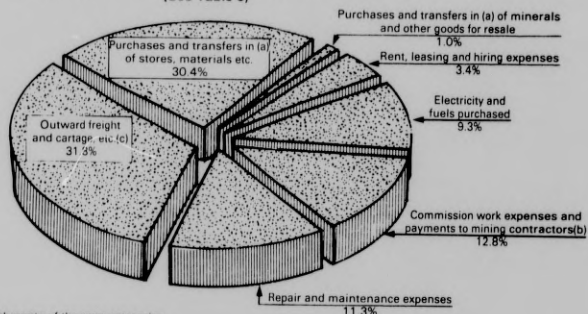


CENSUS OF MINING ESTABLISHMENTS, AUSTRALIA, 1984-85

PERSONS EMPLOYED (AVERAGE OVER WHOLE YEAR INCLUDING WORKING PROPRIETORS) (See Table 10)



PURCHASES, TRANSFERS IN AND SELECTED EXPENSES (See Table 6)



(a) Transfers in from other establishments of the same enterprise.

(b) Includes imputed commission charges for work done by other establishments of the same enterprise.

(c) Includes motor vehicle running expenses, sales commissions payments and imputed charges for sales carried out by other establishments of the same enterprise.

USAGE OF ELECTRICITY AND FUELS (See Table 7)

(Note: Excludes the usage of electricity and fuels produced and used in the same establishment)

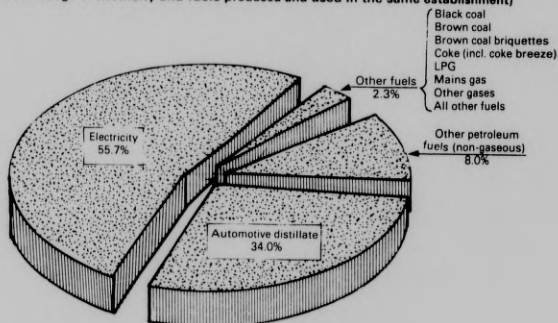


TABLE 1. MINING ESTABLISHMENTS: SUMMARY OF OPERATIONS, BY INDUSTRY CLASS, AUSTRALIA 1984-85

ASIC code	Description	Establish- ments at 30 June	Average employment over whole year(a)			Wages and salaries (b)	Turnover	Stocks		Total Purchases transfers in and selected expenses	Value added	Fixed capital expenditure less disposals	
			Males	Females	Persons			Opening	Closing				
			no.	no.	no.			no.	\$' 000				\$' 000
	Metallic minerals—												
1111	Ferrous metal ores—												
1112	Iron ores	20	6,972	1,018	7,990	234,576	2,001,635	207,599	172,601	956,632	1,010,006	38,552	
	Iron ore pelletising	2											
	Non-ferrous metal ores—												
1121	Bauxite	7	2,106	199	2,305	68,130	513,560	20,001	23,555	117,562	399,552	23,401	
1122	Copper ores	9	2,815	173	2,988	87,327	349,246	55,665	60,060	127,681	225,960	30,974	
1123	Gold ores	139	3,884	300	4,184	109,621	614,177	66,975	86,536	270,451	363,287	308,121	
1124	Mineral sands	14	1,288	124	1,412	33,455	211,966	46,954	35,548	97,518	103,042	21,881	
1125	Nickel ores	5	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1126	Silver-lead-zinc ores	12	6,598	319	6,917	188,970	688,342	145,639	138,401	316,055	365,050	71,573	
1127	Tin ores	107	1,244	150	1,394	27,894	122,622	41,010	38,266	55,462	64,415	11,013	
1128	Uranium ores	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1129	Non-ferrous metal ores n.e.c.	12	711	125	836	23,195	135,795	27,190	27,760	58,335	78,031	3,703	
11	Total metallic minerals	330	28,182	2,737	30,919	850,121	5,211,186	781,519	738,451	2,168,674	2,999,444	542,285	
	Coal, oil and gas—												
1201	Black coal	126	30,505	762	31,267	1,071,330	5,722,752	701,452	645,529	2,515,231	3,151,598	497,396	
1202	Brown coal	6	2,435	17	2,452	66,280	242,567	22,486	15,515	46,434	189,162	35,035	
1300	Oil and gas	27	3,412	757	4,169	131,404	3,875,820	168,510	196,103	302,863	3,600,550	630,522	
12-13	Total coal, oil and gas	159	36,352	1,536	37,888	1,269,014	9,841,139	892,448	857,147	2,864,528	6,941,310	1,162,953	
	Construction materials—												
1401	Sand and gravel	411	1,894	217	2,111	42,212	310,086	17,568	17,865	147,423	162,960	11,577	
1404	Construction materials n.e.c.	445	3,778	341	4,119	88,198	579,503	42,419	42,883	272,275	307,693	24,351	
14	Total construction materials	856	5,672	558	6,230	130,410	889,589	59,987	60,748	419,698	470,653	35,927	
	Other non-metallic minerals—												
1501	Limestone Clays	60	678	22	700	14,450	71,527	6,670	7,403	35,256	37,003	4,528	
1502	Clays	101	227	27	254	4,615	37,390	3,641	4,087	22,261	15,574	1,951	
1504	Salt	16	521	77	598	16,963	89,353	19,551	20,155	24,211	65,745	7,632	
1505	Non-metallic minerals n.e.c.	127	876	127	1,003	21,830	150,593	22,203	28,335	76,508	80,216	175,691	
15	Total other non-metallic minerals	304	2,302	253	2,555	37,858	348,863	52,065	59,979	158,237	198,539	188,808	
	Total mining	1984-85	1,649	72,508	5,084	77,592	2,307,403	16,290,776	1,786,017	1,716,324	5,611,138	10,609,945	1,930,972
	(excl. services to mining)	1983-84	1,630	72,698	4,930	77,628	2,128,562	13,524,166	1,699,315	1,700,388	4,699,883	8,825,357	2,457,209
		1982-83	1,542	73,856	4,900	78,756	2,063,124	11,901,085	1,332,675	1,710,125	4,169,079	8,109,456	3,497,334

(a) Includes working proprietors. (b) Excludes amounts drawn by working proprietors.

TABLE 2. MINING ESTABLISHMENTS: TYPE OF EMPLOYMENT (AT END OF JUNE) BY INDUSTRY CLASS, AUSTRALIA, 1984-85
(Number)

		(Number)													
		Working proprietors			Administrative, technical and mining services employees			Production and all other employees			Total employment				
ASIC code	Description	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Below ground	
	Metallic minerals—														
	Ferrous metal ores—														
1111	Iron ores	}	—	—	2,891	879	3,770	4,136	141	4,277	7,027	1,020	8,047	7	
1112	Iron ore pelletising														
	Non-ferrous metal ores—														
1121	Bauxite	—	—	—	544	137	681	1,551	66	1,617	2,095	203	2,298	—	
1122	Copper ores	—	—	—	725	158	883	1,919	11	1,930	2,644	169	2,813	862	
1123	Gold ores	68	10	78	795	193	988	3,192	117	3,309	4,055	320	4,375	1,014	
1124	Mineral sands	—	—	—	362	97	459	941	19	960	1,303	116	1,419	—	
1125	Nickel ores	—	—	—	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1126	Silver-lead-zinc ores	1	1	2	1,486	292	1,778	4,962	16	4,978	6,449	309	6,758	2,513	
1127	Tin ores	102	37	139	272	82	354	837	34	871	1,211	153	1,364	105	
1128	Uranium ores	—	—	—	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1129	Non-ferrous metal ores n.e.c.	3	1	4	371	111	482	366	11	377	740	123	863	48	
11	Total metallic minerals	174	49	223	8,117	2,210	10,327	19,823	485	20,308	28,114	2,744	30,858	5,486	
	Coal, oil and gas—														
1201	Black coal	—	—	—	5,688	644	6,332	25,200	112	25,312	30,888	756	31,644	11,884	
1202	Brown coal	—	—	—	475	14	489	1,937	3	1,940	2,412	17	2,429	—	
1300	Oil and gas	—	—	—	1,932	728	2,660	1,611	22	1,633	3,543	750	4,293	—	
12-13	Total coal, oil and gas	—	—	—	8,095	1,386	9,481	28,748	137	28,885	36,843	1,523	38,366	11,884	
	Construction materials—														
1401	Sand and gravel	109	34	143	327	180	507	1,520	6	1,526	1,956	220	2,176	3	
1404	Construction materials n.e.c.	112	42	154	660	292	952	2,997	11	3,008	3,769	345	4,114	—	
14	Total construction materials	221	76	297	987	472	1,459	4,517	17	4,534	5,725	565	6,290	3	
	Other non-metallic minerals—														
1501	Limestone	23	6	29	76	14	90	582	3	585	681	23	704	—	
1502	Clays	16	5	21	43	20	63	191	6	197	250	31	281	—	
1504	Salt	5	2	7	234	43	277	267	27	294	506	72	578	—	
1505	Non-metallic minerals n.e.c.	47	8	55	196	89	285	607	39	646	850	136	986	—	
15	Total other non-metallic minerals	91	21	112	549	166	715	1,647	75	1,722	2,287	262	2,549	—	
	Total mining (excl. services to mining)	1984-85	486	146	632	17,748	4,234	21,982	54,735	714	55,449	72,969	5,094	78,063	17,373
		1933-84	485	131	616	17,033	4,144	21,177	55,438	695	56,133	72,956	4,970	77,926	18,952
		1982-83	423	106	529	16,650	4,105	20,755	55,776	695	56,471	72,849	4,906	77,755	20,108

TABLE 3. MINING ESTABLISHMENTS : WAGES AND SALARIES PAID BY INDUSTRY CLASS, AUSTRALIA 1984-85
(\$ '000)

ASIC code	Description	Wages and salaries paid(a) to—		
		Administrative technical and mining services employees	Production and all other employees	All employees
	Metallic minerals—			
	Ferrous metal ores—			
1111	Iron ores	} 111,058	123,519	234,576
1112	Iron ore pelletising			
	Non-ferrous metal ores—			
1121	Bauxite	23,633	44,497	68,130
1122	Copper ores	27,181	60,146	87,327
1123	Gold ores	25,329	84,292	109,621
1124	Mineral sands	11,592	21,862	33,455
1125	Nickel ores	n.p.	n.p.	n.p.
1126	Silver-lead-zinc ores	55,348	133,621	188,970
1127	Tin ores	9,391	18,504	27,894
1128	Uranium ores	n.p.	n.p.	n.p.
1129	Non-ferrous metal ores n.e.c.	13,928	9,266	23,195
11	Total metallic minerals	303,476	546,645	850,121
	Coal, oil and gas—			
1201	Black coal	230,755	840,575	1,071,330
1202	Brown coal	15,090	51,190	66,280
1300	Oil and gas	70,481	60,924	131,404
12-13	Total coal, oil and gas	316,326	952,689	1,269,014
	Construction materials—			
1401	Sand and gravel	9,336	32,877	42,212
1404	Construction materials n.e.c.	21,427	66,771	88,198
14	Total construction materials	30,762	99,648	130,410
	Other non-metallic minerals—			
1501	Limestone	2,532	11,918	14,450
1502	Clays	1,251	3,364	4,615
1504	Salt	8,826	8,137	16,963
1505	Non-metallic minerals n.e.c.	6,275	15,555	21,830
15	Total other non-metallic minerals	18,884	38,975	57,858
	Total mining	1984-85	1,637,956	2,307,403
	(excl. services to	1983-84	1,540,289	2,128,562
	mining)	1982-83	1,536,031	2,063,124

(a) Excludes the drawings of working proprietors.

TABLE 4. MINING ESTABLISHMENTS : COMPONENTS OF TURNOVER BY INDUSTRY CLASS, AUSTRALIA 1984-85
(\$'000)

ASIC code	Description	Sales and transfers out(a) of minerals and other goods			All other operating revenue(b)	Capital work done for own use or for rental or lease	Total turnover
		Produced by the establishment	Not produced by the establishment	Total			
	Metallic minerals—						
	Ferrous metal ores—						
1111	Iron ores	} 1,960,675	227	1,960,902	40,304	429	2,001,635
1112	Iron ore pelletising						
	Non-ferrous metal ores—						
1121	Bauxite	510,541	—	510,541	2,911	109	513,560
1122	Copper ores	343,213	1	343,214	1,143	4,889	349,246
1123	Gold ores	606,490	—	606,490	4,130	3,557	614,177
1124	Mineral sands	204,796	2,412	207,207	2,860	1,898	211,966
1125	Nickel ores	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1126	Silver-lead-zinc ores	666,490	3,129	669,619	5,736	12,987	688,342
1127	Tin ores	119,112	—	119,112	1,933	1,576	122,622
1128	Uranium ores	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1129	Non-ferrous metal ores n.e.c.	133,402	127	133,529	2,031	235	135,795
11	Total metallic minerals	5,103,701	5,896	5,109,597	74,833	26,756	5,211,186
	Coal, oil and gas—						
1201	Black coal	5,625,049	30,279	5,655,329	57,357	10,066	5,722,752
1202	Brown coal	235,753	—	235,753	109	6,705	242,567
1300	Oil and gas	3,831,765	580	3,832,345	16,032	27,443	3,875,820
12-13	Total coal, oil and gas	9,692,567	30,859	9,723,427	73,498	44,214	9,841,139
	Construction materials—						
1401	Sand and gravel	295,666	7,826	303,493	6,547	47	310,086
1404	Construction materials n.e.c.	552,851	8,271	561,121	17,828	554	579,503
14	Total construction materials	848,517	16,097	864,614	24,374	601	889,589
	Other non-metallic minerals—						
1501	Limestone	70,263	315	70,578	727	222	71,527
1502	Clays	35,569	1,319	36,888	502	—	37,390
1504	Salt	87,814	13	87,827	1,442	84	89,353
1505	Non-metallic minerals n.e.c.	132,711	139	132,850	17,561	182	150,593
15	Total other non-metallic minerals	326,357	1,785	328,142	20,232	488	348,863
	Total mining	1984-85	15,971,143	54,637	16,025,780	192,938	16,290,776
	(excl. services to	1983-84	13,161,129	56,650	13,217,779	170,692	13,524,166
	mining)	1982-83	11,610,803	25,778	11,636,581	191,302	11,901,085

(a) Transfers out to other establishments of the same enterprise. (b) Includes bounties and subsidies on production, imputed commission for work done or for sales carried out on behalf of other establishments of the same enterprise. Excludes interest, royalties, dividends and receipts from sales of fixed assets.

TABLE 5. MINING ESTABLISHMENTS : TYPE OF STOCKS BY INDUSTRY CLASS, AUSTRALIA 1984-85
(\$' 000)

ASIC code	Description	Materials, fuels, etc.		Work-in-progress, finished goods and stocks of mine products		Total stocks	
		Opening	Closing	Opening	Closing	Opening	Closing
	Metallic minerals—						
	Ferrous metal ores—						
1111	Iron ores	} 79,743	80,523	127,856	92,078	207,599	172,601
1112	Iron ore pelletising						
	Non-ferrous metal ores—						
1121	Bauxite	13,231	13,618	6,770	9,936	20,001	23,555
1122	Copper ores	32,874	28,832	22,791	31,227	55,665	60,060
1123	Gold ores	26,935	36,048	40,039	50,488	66,975	86,536
1124	Mineral sands	6,016	6,102	40,938	29,447	46,954	35,548
1125	Nickel ores	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1126	Silver-lead-zinc ores	51,203	51,139	94,436	87,262	145,639	138,401
1127	Tin ores	10,043	9,888	30,967	28,379	41,010	38,266
1128	Uranium ores	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1129	Non-ferrous metal ores n.e.c.	13,307	12,748	13,883	15,012	27,190	27,760
11	Total metallic minerals	275,771	277,419	505,746	461,032	781,519	738,451
	Coal, oil and gas—						
1201	Black coal	175,746	180,562	525,705	464,968	701,452	645,529
1202	Brown coal	19,279	12,696	3,206	2,818	22,486	15,515
1300	Oil and gas	69,031	78,811	99,479	117,292	168,510	196,103
12-13	Total coal, oil and gas	264,056	272,069	628,390	585,078	892,448	857,147
	Construction materials—						
1401	Sand and gravel	4,044	3,452	13,524	14,413	17,568	17,865
1404	Construction materials n.e.c.	6,212	6,489	36,207	36,394	42,419	42,883
14	Total construction materials	10,256	9,942	49,732	50,807	59,987	60,748
	Other non-metallic minerals—						
1501	Limestone	2,980	3,085	3,691	4,318	6,670	7,403
1502	Clays	1,072	1,561	2,569	2,526	3,641	4,087
1504	Salt	2,712	3,902	16,839	17,152	19,551	20,155
1505	Non-metallic minerals n.e.c.	1,859	1,764	20,344	26,570	22,203	28,335
15	Total other non-metallic minerals	8,622	9,413	43,443	50,566	52,065	59,979
	Total mining	1984-85	558,705	568,843	1,227,312	1,147,482	1,716,324
	(excl. services to	1983-84	500,162	526,371	1,199,154	1,699,315	1,700,388
	mining)	1982-83	474,465	491,367	858,210	1,218,759	1,710,125

TABLE 6. MINING ESTABLISHMENTS : PURCHASES, TRANSFERS IN AND SELECTED EXPENSES BY INDUSTRY CLASS, AUSTRALIA 1984-85
(\$' 000)

ASIC code	Description	Electricity and fuels purchased	Purchases and transfers in(a)		Commission work ex- penses and payments to mining contractors (c)	Repair and main- tenance expenses	Outward freight and cartage (d)	Motor vehicle running expenses	Sales com- mission payments	Rent, leasing and hiring expenses			Total purchases transfers in and selected expenses	
			Stores materials etc.(b)	Minerals and other goods for resale						Land building and other structures	Motor vehicles	Plant machinery and other equipment		
	Metallic minerals—													
	Ferrous metal ores—													
1111	Iron ores	39,165	299,003	205	198,014	62,856	327,882	5,847	9,661	6,553	1,212	6,235	956,632	
1112	Iron ore pelletising													
	Non-ferrous metal ores—													
1121	Bauxite	26,333	50,184	—	8,796	18,091	10,885	1,476	947	112	18	720	117,562	
1122	Copper ores	11,150	84,537	—	13,633	8,219	7,647	513	871	320	468	322	127,681	
1123	Gold ores	46,878	105,946	—	83,389	20,557	3,211	3,212	36	949	343	5,931	270,451	
1124	Mineral sands	20,861	25,223	1,466	8,315	18,674	12,667	2,212	1,498	343	191	6,068	97,518	
1125	Nickel ores	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1126	Silver-lead-zinc ores	32,424	159,718	3,050	21,541	16,476	78,986	1,065	—	260	632	1,901	316,055	
1127	Tin ores	11,536	15,387	473	8,471	12,141	1,894	1,096	466	558	280	3,161	55,462	
1128	Uranium ores	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1129	Non-ferrous metal ores n.e.c.	9,268	11,148	—	3,265	13,094	17,555	509	1,203	116	198	1,979	58,335	
11	Total metallic minerals	218,111	827,305	5,194	363,949	191,374	482,794	17,217	19,651	11,370	3,465	28,244	2,168,674	
	Coal, oil and gas—													
1201	Black coal	217,497	679,102	31,347	179,234	300,000	1,008,603	9,254	6,753	13,288	1,088	69,065	2,515,231	
1202	Brown coal	169	25,138	—	2,895	8,452	4,963	2,722	3	205	49	1,838	46,434	
1300	Oil and gas	12,539	104,120	426	99,188	36,756	37,491	2,614	145	4,913	1,075	3,596	302,863	
12-13	Total coal, oil and gas	230,205	808,360	31,773	281,317	345,208	1,051,057	14,590	6,901	18,406	2,212	74,499	2,864,528	
	Construction materials—													
1401	Sand and gravel	18,711	16,683	6,343	14,067	26,577	42,361	7,269	45	549	2,573	12,246	147,423	
1404	Construction materials n.e.c.	33,705	28,976	9,154	18,951	58,052	82,727	9,533	900	1,508	1,803	26,966	272,275	
14	Total construction materials	52,417	45,658	15,496	33,017	84,629	125,088	16,802	945	2,057	4,376	39,212	419,698	
	Other non-metallic minerals—													
1501	Limestone	7,314	4,629	203	4,141	7,034	9,320	859	4	81	241	1,431	35,256	
1502	Clays	1,996	3,064	1,257	4,536	1,361	8,257	830	209	68	126	558	22,261	
1504	Salt	6,714	4,579	14	3,878	2,348	2,163	744	1,187	438	144	2,002	24,211	
1505	Non-metallic minerals n.e.c.	8,716	10,764	171	24,771	4,788	18,874	1,367	3,801	834	187	2,234	76,508	
15	Total other non-metallic minerals	24,740	23,035	1,645	37,327	15,531	38,615	3,801	5,201	1,420	698	6,225	158,237	
	Total mining	1984-85	525,472	1,704,358	54,110	715,609	636,742	1,697,554	52,411	32,699	33,253	10,751	148,179	5,611,138
	(excl. services to	1983-84	455,699	1,475,013	51,243	578,365	594,661	1,289,086	49,583	31,275	20,487	10,644	143,825	4,699,883
	mining)	1982-83	1,705,507	53,153	561,646	535,049	1,174,894	1,174,894	12,497	8,511	117,822	4,169,079		

(a) Transfers in from other establishments of the same enterprise. (b) Includes minerals for further processing. (c) Includes imputed commission charges for work done by other establishments of the same enterprise. (d) Includes imputed charges for freight carried out by other establishments of the same enterprise.

TABLE 7. MINING ESTABLISHMENTS : USAGE(a) OF ELECTRICITY AND FUELS BY INDUSTRY CLASS, AUSTRALIA 1984-85
(\$'000)

ASIC code	Description	Electricity	Petroleum fuels (non-gaseous)(b)		Other fuels	Total
			Automotive distillate	Other(c)		
	Metallic minerals—					
	Ferrous metal ores—					
1111	Iron ores	} 43,738	20,814	n.p.	n.p.	82,303
1112	Iron ore pelletising					
	Non-ferrous metal ores—					
1121	Bauxite	8,883	13,858	n.p.	n.p.	29,364
1122	Copper ores	24,390	3,743	n.p.	n.p.	28,565
1123	Gold ores	17,957	24,445	5,748	456	48,606
1124	Mineral sands	14,634	1,629	2,139	2,458	20,860
1125	Nickel ores	n.p.	n.p.	n.p.	—	n.p.
1126	Silver-lead-zinc ores	43,075	4,619	1,486	72	49,252
1127	Tin ores	5,667	5,292	315	143	11,417
1128	Uranium ores	n.p.	n.p.	n.p.	n.p.	n.p.
1129	Non-ferrous metal ores n.e.c.	n.p.	4,807	3,603	n.p.	9,268
11	Total metallic minerals	168,840	90,603	39,337	12,463	311,243
	Coal, oil and gas—					
1201	Black coal	144,328	69,905	2,289	177	216,699
1202	Brown coal	7,282	2,192	n.p.	n.p.	9,562
1300	Oil and gas	3,594	6,364	n.p.	n.p.	12,540
12-13	Total coal, oil and gas	155,204	78,461	4,868	268	238,801
	Construction materials—					
1401	Sand and gravel	6,558	10,558	1,510	105	18,731
1404	Construction materials n.e.c.	11,092	20,842	1,868	6	33,808
14	Total construction materials	17,650	31,400	3,379	111	52,540
	Other non-metallic minerals—					
1501	Limestone	2,854	2,155	675	1,568	7,252
1502	Clays	502	734	202	559	1,997
1504	Salt	2,130	3,734	704	—	6,568
1505	Non-metallic minerals n.e.c.	1,726	5,992	608	411	8,737
15	Total other non-metallic minerals	7,212	12,616	2,189	2,539	24,556
	Total mining	1984-85 348,906	213,081	49,774	15,381	627,142
	(excl. services to mining)	1983-84 303,244	185,055	51,429	12,051	551,779
		1982-83 271,451	157,732	60,233	14,807	504,225

(a) Excludes electricity and fuels produced and used in own establishment.

(b) Excludes fuels used in on-highway vehicles.

(c) Industrial diesel fuel, furnace and other fuel oil, light heating and burning oils, etc.

TABLE 8. MINING ESTABLISHMENTS: FIXED CAPITAL EXPENDITURE BY TYPE OF ASSET AND TRANSACTION, BY INDUSTRY CLASS, AUSTRALIA 1984-85
(5'000)

ASIC code		Capital expenditure on—									
		New fixed tangible assets					Fixed capital expenditure less disposals				
		Buildings and other structures	Mine devel- opment	Vehicles, plant, machinery and equipment	Total	Land and second- hand assets	Disposals of fixed tangible assets	Land, buildings and other structures (incl. mine development)	Vehicles plant, machinery and equipment	Total	
Description											
	Metallic minerals—										
	Ferroous metal ores—										
1111	Iron ores	3,925	121	36,131	40,177	10	1,634	3,872	34,680	38,552	
1112	Iron ore pelletising										
	Non-ferrous metal ores—										
1121	Bauxite	2,966	5,808	16,531	25,305	295	2,200	8,733	14,668	23,401	
1122	Copper ores	4,104	13,389	17,666	35,158	4,655	8,839	16,416	14,558	30,974	
1123	Gold ores	55,334	129,754	120,349	305,437	10,480	7,795	185,270	122,852	308,121	
1124	Mineral sands	6,665	7,841	7,493	21,999	6,527	6,645	18,199	3,682	21,881	
1125	Nickel ores	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1126	Silver-lead-zinc ores	14,999	15,255	45,085	75,339	242	4,007	29,653	41,921	71,573	
1127	Tin ores	1,225	2,239	6,547	10,012	3,661	2,660	3,995	7,018	11,013	
1128	Uranium ores	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1129	Non-ferrous metal ores n.e.c.	119	710	3,288	4,117	227	641	663	3,039	3,703	
11	Total metallic minerals	102,603	182,565	268,194	553,362	26,175	37,252	287,374	254,911	542,285	
	Coal, oil and gas—										
1201	Black coal	123,866	146,283	277,086	547,235	5,080	54,920	267,192	230,204	497,396	
1202	Brown coal	24,700	6,203	4,096	34,999	39	3	30,903	4,132	35,035	
1300	Oil and gas	91,640	286,380	262,350	640,370	59	9,907	374,123	256,399	630,522	
12-13	Total coal, oil and gas	240,206	438,866	543,532	1,222,604	5,178	64,830	672,218	490,735	1,162,953	
	Construction materials—										
1401	Sand and gravel	183	306	10,102	10,591	5,001	4,015	2,064	9,512	11,577	
1404	Construction materials n.e.c.	757	32	18,706	19,495	10,047	5,191	3,512	20,839	24,351	
14	Total construction materials	940	338	28,808	30,086	15,048	9,206	5,576	30,351	35,927	
	Other non-metallic minerals—										
1501	Limestone	389	1,186	2,968	4,543	544	558	1,656	2,873	4,528	
1502	Clays	180	123	1,245	1,549	511	109	475	1,477	1,951	
1504	Salt	493	858	6,408	7,759	50	177	1,401	6,232	7,632	
1505	Non-metallic minerals n.e.c.	558	72,168	99,843	172,570	4,713	1,587	72,972	102,724	175,696	
15	Total other non-metallic minerals	1,621	74,334	110,465	186,420	5,819	2,431	76,503	113,305	189,808	
Total mining		1984-85	345,370	696,103	950,999	52,219	113,719	1,041,671	889,302	1,930,972	
(excl. services to mining)		1983-84	399,331	532,165	1,647,846	52,513	174,645	921,442	1,535,766	2,457,209	
		1982-83	1,073,133	639,824	1,854,088	42,071	111,781	1,721,812	1,775,523	3,497,334	

TABLE 9. MINERAL ROYALTIES BY INDUSTRY CLASS, AUSTRALIA, 1984-85
(S'000)

ASIC code	Description	Mineral royalties paid by mining establishments		
		To governments	To others	Total
	Metallic minerals—			
	Ferrous metal ores—			
1111	Iron ores	} 85,696	16,477	102,173
1112	Iron ore pelletising			
	Non-ferrous metal ores—			
1121	Bauxite	23,036	8	23,044
1122	Copper ores	14,668	—	14,668
1123	Gold ores	1,847	1,267	3,115
1124	Mineral sands	4,254	1,669	5,924
1125	Nickel ores	n.p.	n.p.	n.p.
1126	Silver-lead-zinc ores	16,276	58	n.p.
1127	Tin ores	1,432	32	16,334
1128	Uranium ores	n.p.	n.p.	1,465
1129	Non-ferrous metal ores n.e.c.	1,952	875	n.p.
11	Total metallic minerals	164,273	33,581	2,827
	Coal, oil and gas—			197,854
1201	Black coal	188,534	2,382	
1202	Brown coal	4,409	—	190,916
1300	Oil and gas	364,493	64,251	4,409
12-13	Total coal, oil and gas	557,436	66,633	428,744
	Construction materials—			624,069
1401	Sand and gravel	3,060	8,870	
1404	Construction materials n.e.c.	2,800	8,345	11,930
14	Total construction materials	5,860	17,215	11,145
	Other non-metallic minerals—			23,075
1501	Limestone	1,646	560	
1502	Clays	442	280	2,206
1504	Salt	643	33	722
1505	Non-metallic minerals n.e.c.	4,244	1,514	675
15	Total other non-metallic minerals	6,976	2,387	5,759
	Total mining	734,544	119,816	854,361
	(excl. services to mining)	1983-84	99,038	684,674
		1982-83	88,022	641,763

TABLE 10. MINING ESTABLISHMENTS : SUMMARY OF OPERATIONS BY STATE, 1982-83 TO 1984-85

	Establishments at 30 June	Average employment over whole year(a)			Wages and salaries (b)	Turnover	Stocks		Total Purchases transfers in and selected expenses	Value added	Fixed capital expenditure less disposals
		Males	Females	Persons			Opening	Closing			
	no.	no.	no.	no.	\$' 000	\$' 000	\$' 000	\$' 000	\$' 000	\$' 000	\$' 000
<i>New South Wales(c)</i>											
1984-85	573	25,861	664	26,525	816,567	3,409,628	470,508	427,518	1,657,286	1,709,352	280,385
1983-84	563	26,402	692	27,094	782,372	3,069,926	474,052	472,948	1,428,843	1,639,980	280,158
1982-83	581	27,986	714	28,700	809,139	3,013,459	392,236	478,364	1,283,511	1,816,075	561,077
<i>Victoria</i>											
1984-85	221	5,358	379	5,737	160,293	3,104,922	65,879	62,579	281,879	2,819,743	240,350
1983-84	230	5,290	373	5,663	152,508	2,533,919	61,633	59,700	281,255	2,250,731	236,320
1982-83	227	5,199	340	5,539	140,125	2,068,903	55,918	60,924	253,544	1,820,366	252,419
<i>Queensland</i>											
1984-85	458	17,324	1,128	18,452	587,027	4,281,758	488,786	464,305	1,654,945	2,602,332	479,710
1983-84	445	17,326	1,208	18,534	526,005	3,176,375	423,690	437,710	1,261,704	1,928,690	645,680
1982-83	363	16,985	1,180	18,165	490,645	2,646,383	306,270	423,422	952,091	1,811,443	1,153,722
<i>South Australia</i>											
1984-85	106	2,652	308	2,960	74,811	862,409	139,177	169,019	231,131	661,120	197,119
1983-84	113	3,040	345	3,385	71,564	628,355	84,117	94,203	167,494	470,947	585,362
1982-83	109	3,455	377	3,832	69,033	408,717	63,768	84,309	164,842	264,415	515,544
<i>Western Australia</i>											
1984-85	218	16,682	2,218	18,900	530,402	3,625,246	377,285	369,008	1,432,791	2,184,177	649,925
1983-84	208	15,789	1,937	17,726	465,956	3,219,688	435,385	388,600	1,259,226	1,913,676	666,648
1982-83	193	15,204	1,913	17,117	428,393	2,853,353	328,502	427,909	1,216,002	1,736,757	986,958
<i>Tasmania</i>											
1984-85	52	3,106	170	3,276	88,840	383,074	75,944	68,107	208,301	166,936	22,003
1983-84	54	3,425	179	3,604	82,727	353,855	70,002	76,070	193,077	166,845	18,810
1982-83	55	3,648	189	3,837	85,531	388,390	43,667	69,633	208,548	205,807	17,783
<i>Northern Territory</i>											
1984-85	21	1,525	217	1,742	49,464	623,741	168,440	155,788	144,803	466,286	61,481
1983-84	17	1,426	196	1,622	47,431	542,048	150,436	171,158	108,282	454,488	24,230
1982-83	14	1,379	187	1,566	40,259	521,881	142,314	165,565	90,540	454,592	9,831
<i>Aust. Capital Territory(d)</i>											
<i>Australia</i>											
1984-85	1,649	72,508	5,084	77,592	2,307,403	16,290,776	1,786,017	1,716,324	5,611,138	10,609,945	1,930,972
1983-84	1,630	72,698	4,930	77,628	2,128,562	13,524,166	1,699,315	1,700,388	4,699,883	8,825,357	2,457,209
1982-83	1,542	73,856	4,900	78,756	2,063,124	11,901,085	1,332,675	1,710,125	4,169,079	8,109,456	3,497,334

(a) Includes working proprietors. (b) Excludes amounts drawn by working proprietors. (c) Includes the Australian Capital Territory. (d) Included in New South Wales.