

DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

Rept.Bk.No. 79/151

MINERAL PRODUCTION STATISTICS
(for 6 months period ended
June 1979)

GEOLOGICAL SURVEY

By

M.D. FELSTEAD
FIELD ASSISTANT

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D.M.E. No. 70/79

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(for 6 months period ended June 1979)

INTRODUCTION

With the successful implementation of the new mining return this period, a more detailed and exact statistical record of the State's mineral production has been achieved.

Ready compilation and retrieval of the mineral production statistics, in various categories, is possible by the use of the Mining Returns computer file.

6 months Period Ending, June 1979

<u>Mineral Product</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
Copper (metal)	7 021	9 923 404
Gold - gms	2 322	15 175
Iron Ore	1 243 134	11 382 388
Jaspilite	27 691	55 220
Lead	7	2 014
Zinc	-	-
Silver - gms	429	4 331
Barite	4 301	169 743
Coal	732 821	6 106 600
Dolomite	351 311	776 662
Felspar	490	13 730
Flint Pebbles	17	928
Gypsum	340 302	1 353 848
Jade	19	3 762
Kaolin	4 208	93 033

6 months Period Ending December, 1978

<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
7 763	6 571 606
1 575	9 196
1 395 139	12 556 251
16 918	33 836
19	12 200
-	-
9 753	1 634
8 466	345 565
781 346	5 159 000
314 448	700 825
714	19 992
38	1 677
316 177	1 259 242
7	3 260
5 069	103 980

Cont.

<u>Mineral Product</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
Limestone-Agricultural	4 085	8 170		
" Cement	533 837	1 067 674		
" Chemical	226 026	455 019	966 936	1 871 341
" Flux	291 676	438 779		
" Whiting	18 976	85 058		
Mica (Damourite)	1 049	30 201	813	21 972
Micaceous Hematite	602	9 033	-	-
Ornamental Minerals-Kgs	3 063	768	3 290	3 513
Phosphate	3 073	19 360	3 913	24 169
Salt	312 233	1 206 648	321 819	1 203 302
Semi-Precious stones-Kgs	50	50	-	-
Silica	4 435	268 043	32 706	278 871
Sillimanite	322	19 017	223	12 271
Slate	66	213	93	278
Talc	8 002	244 134	7 237	201 175
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Total Minerals Value	-	\$33 813 713	-	\$30 395 156

6 months Period Ending June 1979

6 months Period Ending December 1978

Construction Materials

1. Dimension Stone (Building stone, etc.)

	<u>Rock Type</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
(a)	Dolomite/Limestone	9 026	90 260	10 896	-
	Granite	1 529	179 237	1 733	-
	Marble	-	-	36	-
	Quartzite/Sandstone	67	670	701	-
	Slate	2 877	68 765	2 657	-
Total Dimension Stone		13 499 (tonnes)	\$338 932	16 023 (tonnes)	

2.	<u>Dolomite/Limestone</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
	Product Type				
	Crushed Rock	264 061	-	325 906	-
	Filling	163 615	-	11 834	-
	Filling Sand	104 581	-	148 284	-
	Gravels	627	-	-	-
	Rail Ballast	29 833	-	6 859	-
	Rip Rap & Spalls	34 565	-	11 575	-
	Rubble	1 219 790	-	1 362 421	-
	Screenings	460 163	-	541 182	-
	Shell Grit	406	-	41	-
	Specification Sand	51 409	-	43 325	-
Total Dolomite/Limestone		2 329 050	\$5 196 471	2 451 427	-

(a) The exact value of Dolomite/Limestone stone is unavailable from the Mining Return computer file. A minimum value of \$10/tonne was used to estimate the production value.

6 months Period Ending June 19796 months Period Ending December 1978

3.	<u>Quartzite/Sandstone</u> <u>Product Type</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
	Coloured Aggregates & Ornaments	60	-	-	-
	Crushed Rock	286 244	-	483 602	-
	Filling	60 754	-	710	-
	Filling Sand	67 688	-	113 153	-
	Gravels	725	-	-	-
	Rail Ballast	34 464	-	53 500	-
	Rip Rap & Spalls	13 050	-	2 970	-
	Rubble	570 195	-	567 843	-
	Screenings	360 847	-	311 728	-
	Specification Sand	132 183	-	107 078	-
	Washed Sand	35 878	-	32 861	-
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	Total Quartzite/Sandstone	1 562 108 tonnes	\$4 776 182	1 673 445 tonnes	

<u>6 months Period Ending June 1979</u>			<u>6 months Period Ending December 1978</u>		
4.	<u>Other Rock Types</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
	Basalt	34 395	101 690	43 317	-
	Gneiss	-	-	20	-
	Granite	44 895	209 094	49 521	-
	Gravels	74 452	55 754	64 400	-
	Greywacke	36 634	122 758	81 855	-
	Ironstone	450 064	22 532	10 313	-
	Marble	1 910	39 502	1 850	-
	River Gravels	132 239	72 690	17 110	-
	Shale	65 771	38 479	29 500	-
	Slate	33 464	21 815	47 507	-
	Unspecified	4 116	2 573	83 850	-
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	Total Other Rock Types	472 940 (tonnes)	\$ 686 887	429 243	-
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	Total of all Construction Materials	4 377 597 (tonnes)	\$10 998 472	4 570 138	\$11 802 028

6 months Period Ending June 19796 Months Period Ending Decmber 1978Natural Sand Products

<u>Product Type</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
Bitumen sand	10 991	-	17 969	-
Bricklaying sand	31 960	-	92 848	-
Concrete Block sand	12 907	-	19 789	-
Concrete sand	587 585	-	595 693	-
Filter sand	2 387	-	1 868	-
Foundry sand	16 945	-	39 122	-
Garden sand	20 794	-	23 276	-
Gravels	37 333	-	54 643	-
Loam	10 725	-	18 298	-
Packing/Filling sand	389 845	-	307 497	-
Plastering sand	4 043	-	31 826	-
Shell Grit	4 236	-	8 956	-
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Total Natural Sand Products	1 160 985 (tonnes)	\$3 077 463	1 211 785 (tonnes)	\$3 344 151

6 month Period Ending June 19796 month Period Ending December 1978Natural Clay Products

<u>Product Type</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
Brick clay	-	-	5 068	-
Cement shale	27 748	-	16 079	-
Coloured shale	317 428	-	130 105	-
Fine tailings	-	-	743	-
Fire clay	4 380	-	33 271	-
Red Plastic clay	13 603	-	14 734	-
Rubble	962 065	-	1 266	-
White Plastic clay	58 724	-	3 951	-
White shale	123 667	-	30 996	-
<hr/>				
Total Clay Products	1 507 255 (tonnes)	\$1 559 684	281 231 (tonnes)	\$ 733 579

6 months Period Ending June 1979

6 months Period Ending December 1978

SUMMARY

	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>	<u>Quantity (tonnes)</u>	<u>Value (\$'s)</u>
Mineral Products	-	33 813 713	-	30 395 156
Construction Materials	4 377 597	10 998 472	4 570 138	11 802 028
Natural Sand Products	1 160 985	3 077 463	1 211 785	3 344 151
Natural Clay Products	1 507 255	1 559 684	281 231	733 579
(a) Natural Gas	$1.43 \times 10^9 \text{ m}^3$	25 385 134	$1.43 \times 10^9 \text{ m}^3$	23 143 815
Opal Production Estimate	-	15 000 000	-	15 000 000
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TOTAL S.A. MINERAL PRODUCTION	-	\$89 834 466	-	\$84 418 729
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(a) Value of gas "ex-Moomba-plant". Includes \$95 408 value of CO₂ from Caroline No. 1 Well.

COMPARISON OF FIGURES ON A SIX MONTHLY BASIS

A. Marked increases in the value of mineral production occurred in the following.

1. Copper - increase due to higher copper prices prevailing on world markets.
2. Gold - increase due to increased market prices.
3. Silver - increase due to increased market prices.
4. Coal - increase due to a reassessment of valuation reflecting increased mining costs generally.
5. Mica (Damourite) - increase reflects increased availability and output.
6. Micaceous Hematite - new deposit - production commenced this period.
7. Sillimanite - increased availability and demand.
8. Natural Gas - increase reflects increased consumer prices.
9. Natural Clay Products - increase reflects inclusion of clay-rubble into this category.

B. Marked decreases in the value of mineral production occurred in the following.

1. Iron Ore - decrease reflects slow down in overseas sales.
2. Barite - reduced sales reflecting lower demand.
3. Construction Materials - reduced value mainly reflects removal of clay-rubble from this category.

APPENDIX I

Dolomite/Limestone Metropolitan Quarry Products

<u>Quarry Product</u>	<u>Quantity (tonnes)</u>
Screenings	403 251
Rail Ballast	9 833
Crushed Rock	161 767
Rubble	275 063
Filling	18 364
Rip Rap and Spalls	33 554
Filling Sand	101 538
Washed Sand	-
Specification Sand	47 839
Dimension Stone	-
Ornamentals	-

APPENDIX II

Quartzite/Sandstone Metropolitan Quarry Products

<u>Quarry Product</u>	<u>Quantity (tonnes)</u>
Screenings	277 856
Rail Ballast	33 697
Crushed Rock	242 409
Rubble	439 987
Filling	31 021
Rip Rap and Spalls	6 205
Filling Sand	64 982
Washed Sand	35 878
Specification Sand	128 690
Dimension Stone	53
Ornamentals	-

APPENDIX III

Marble, Slate and River Gravels Metropolitan Quarry Products

<u>Quarry Product</u>	<u>Marble</u> <u>(tonnes)</u>	<u>Slate</u> <u>(tonnes)</u>	<u>River Gravels</u> <u>(tonnes)</u>
Rubble	-	10	1 291
Dimension Stone	-	13	-
Ornamentals	24	-	-

APPENDIX IV

QUARRY PRODUCTS - COUNTRY

<u>ROCK</u>	<u>SCREENING</u>	<u>RAIL BALLAST</u>	<u>CRUSHED ROCK</u>	<u>RUBBLE</u>	<u>FILLING</u>	<u>RIP RAP & SPALLS</u>	<u>FILLING SAND</u>	<u>WASHED SAND</u>	<u>SPECIFICATION SAND</u>	<u>DIMENSION STONE</u>	<u>ORNAMENTALS</u>	<u>GRAV</u>
Basalt	6 727	661	2 850	13 977		3 556	1 038	2 627	361			
Dolomite/Limestone	45 640	26 000	79 656	186 907	2 600	1 011	3 043		3 570	9 026		
Granite	22 894	740	6 214	8 864			6 024			1 529		1
Greywacke	21 369			15 164			101					
Marble											1 886	
Quartzite & Sand- stone	62 281	767		39 322	15 904	6 645	2 706		3 493	14	60	7
River Gravels			43 819	123							225	4
Shale											14	
Slate			1 243		788					2 864		
	180 911	22 166	133 782	264 357	19 292	11 412	12 912	2 627	7 424	13 433	2 185	1 3

QUARRY PRODUCTS - GOVERNMENT

<u>ROCK</u>	<u>SCREENING</u>	<u>RAIL BALLAST</u>	<u>CRUSHED ROCK</u>	<u>RUBBLE</u>	<u>FILLING</u>	<u>GRAVEL</u>
Basalt					598	
Dolomite/Limestone	11 272		22 638	757 824	142 651	
Gravels				74 452		
Ironstone				45 064		
Quartzite & Sand- stone	710		36	90 866	13 829	
River Gravels					107 205	22 905
Shale	14 687			24 512	26 558	
Slate			11 829	5 356	14 236	
Unspecified					4 116	
	26 669		34 503	998 090	309 195	22 905

APPENDIX V

NATURAL SAND PRODUCTS - METROPOLITAN

<u>Sand Type</u>	<u>Washed</u>	<u>Dry Screened</u>	<u>Untreated</u>	
Bitumen sand		10 871		10 871
Bricklaying sand	1 452	26 856		26 308
Concrete Block Sand	12 707			12 707
Concrete Sand	472 807	35 597		508 404
Foundry Sand			192	192
Garden Sand	4 708	1 000	174	5 882
Gravels	25 880	3 484	1 000	30 364
Loam		1 605		1 605
Packing/Filling Sand	68 385	9 080	89 355	166 820
Plastering Sand	21 714	11 900		33 614
Shell Grit			2 380	2 383
<hr/>				
	607 653	100 393	93 101	801 147

NATURAL SAND PRODUCTS - COUNTRY

<u>Sand Type</u>	<u>Washed</u>	<u>Dry Screened</u>	<u>Untreated</u>	
Bricklaying Sand		3 577	75	3 652
Concrete Block Sand			200	200
Concrete Sand	36 668	21 886	20 627	79 181
Filter Sand	2 187		200	2 387
Foundry Sand	1 745		15 008	16 753
Garden Sand	250		14 662	14 912
Gravels	2 296	74	3 157	5 527
Loam		2 594	2 955	5 549
Packing/Filling Sand	7 825	12 937	56 256	77 018
Plastering Sand	1 410	203	50	1 663
Shell Grit	44	844	968	1 856
<hr/>				
	52 425	42 115	114 158	208 698

Cont.

NATURAL SAND PRODUCTS - GOVERNMENT, COUNCILS

<u>Sand Type</u>	<u>Washed</u>	<u>Dry Screened</u>	<u>Untreated</u>
Bitumen Sand			120 120
Gravels			1 442 1 442
Loam			3 971 3 571
Packing/Filling Sand		107 651	38 356 146 007
<hr/>			
		107 651	43 489 151 140

APPENDIX VI

NATURAL CLAY PRODUCTS - METROPOLITAN

Coloured Shale	310 959
Fire Clay	78
Red Plastic Clay	1 460
White Plastic Clay	58 606
White Shale	109 487
	<hr/> 480 590

NATURAL CLAY PRODUCTS - COUNTRY

Cement Shale	27 748
Coloured Shale	6 469
Fire Clay	4 302
Red Plastic Clay	12 143
White Plastic Clay	118
White Shale	13 820
	<hr/> 64 600

NATURAL CLAY PRODUCTS - GOVERNMENT COUNCILS

Rubble	962 065
	<hr/> 962 065