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SOUTH AUSTRALIAN DEPARTMENT OF MINES

REVIEW OF MINERAL PRODUCTION - 1954.

The nominal value of mineral production in South Australia during the year 1954 was £8,557,486.

This sharp increase in production value was in some measure attributable to an adjustment in the production value of some minerals. Based on the 1953 basis of valuation the production value was £7,035,688, which still represents a 13 per cent increase in production over the previous year's production value of £6,203,162.

Production of iron ore increased by 11 per cent to 2,867,060 tons, to meet the demand created by increased steel making capacity at Pt. Kembla.

Output of limestone flux, and refractory dolomite, for the steel industry, collectively remained constant and did not reflect a similar increase in production.

Production of other metallic minerals, gold, silver, copper and lead remained insignificant.

Coal output increased from 448,484 tons in 1953 to 495,106 tons. The increase, mainly in the latter half of the year, was to supply the demand of the new Port Augusta regional power station, which came on load in July, 1954. A marked increase in output to supply power demands may be expected in 1955.

Production of gypsum increased from 181,640 tons to 194,772. Output of seed gypsum was increased considerably to meet the expanded production of Portland Cement manufacture at both the Angaston and Birkenhead cement plants. At Stenhouse Bay, where 70 per cent of the gypsum is produced for plaster manufacture, plans for a considerable increase in output are nearing completion, and will reflect in the 1955 output.

The most notable output increase of any particular mineral is that of salt, which rose from 239,285 tons in 1953, to 303,893 tons, an increase in output of 27 per cent. The increase again

was principally from the I.C.I. solar evaporation plant at Osborne where salt is produced solely for the chemical industry. Elsewhere the salt harvest was above average.

Plans for substantial increase in production at Whyalla and Stenhouse Bay have not yet reached completion, but will come into effect during the 1955 harvest.

Production of salt from the works under construction near Port Augusta is not anticipated before the 1956 harvest season.

Production and demand for barytes remained much at the same level, but talc production increased from 6,652 tons to 9,088 tons, mainly to fulfil a wider spread in general demand.

High grade limestone for industrial purposes, particularly for cement and chemical manufacture, showed marked increases in output, reflecting the recent expansion in these two industries.

Clay and shale utilized in the brick, cement, and ceramic industries rose from an output of 343,188 tons in 1953 to a 1954 output of 392,467 tons. This increase reflects a direct rise of 14 per cent in the availability of basic building materials. Also included in this category is sand for construction purposes which rose in output from 684,000 to 1,145,000 tons.

Aggregate for road and building construction purposes showed a noteworthy increase in production from 3,200,000 to 3,900,000 tons in 1954.

In all branches of the industry, production rate has either been maintained, or in most cases substantially increased.

Developments worthy of note associated with the mineral industry, have been the expansion of the Portland cement plants at Angaston and Birkenhead, consuming greater quantities of high grade limestone, shale and gypsum; expansion of the heavy chemical industry at Osborne, consuming increased quantities of limestone and salt, full scale mining and treatment operations at Radium Hill for the production of uranium concentrates, which will be further treated for the chemical extraction of uranium salts at the Port Pirie plant now almost complete, and rapid progress on the sulphuric acid manufacturing project to utilize pyrite mined and concentrated

at Nairne, in a modern acid plant under construction at Birkenhead.

The accompanying tabulation shows details of the South Australian Mineral Production during 1954:-

Construction materials	Quantity disposed of (tons)	Value of output (£)
Building Stone		
Granite	350	4,050
Limestone	27,202	38,782
Marble	3,619	9,376
Sandstone	18,724	28,264
Slate	3,316	20,692
Roadstone		
Basalt	42,364	42,174
Dolomite	89,459	73,458
Gravel	675,914	257,561
Granite	500	250
Ironstone	630	315
Limestone	1,590,977	882,986
Quartzite	1,375,027	869,139
Sand	1,145,746	397,896
Sandstone	15,185	6,074
Slate and Shale	77,593	23,278
TOTAL		2,654,295

TOTAL VALUE OF MINERALS DISPOSED OF IN 1954.

Metallic minerals	£3,299,500
Non-metallic minerals	£2,603,691
Construction materials	£2,654,295
TOTAL	£8,557,486

MINERAL PRODUCTION STATISTICS, 1954.

Mineral	Quantity disposed of		Value of Output (£)
	Ore (tons)	Mineral Obtained after Treatment	
Metallic Minerals			
Copper	3	¼ ton	73
Gold		54 fine oz.	836
Iron	2,867,060		3,297,119
Lead	55	14 tons	1,231
Silver		625 oz.	241
TOTAL			3,299,500
Non-metallic minerals			
Barite	3,828		31,106
Clay - Ball and Kaolin	3,325		9,807
- Brick	301,543		155,772
- Cement	20,548		12,842
- Fire	24,861		24,861
- Pottery	42,190		63,285
Coal (sub-bituminous)	495,106		650,321
Damourite	514		2,982
Felspar	3,620		15,089
Dolomite	118,612		76,639
Flint Pebbles	117		1,735
Gypsum	194,772		182,210
Limestone - Agricultural	4,487		3,369
- Burned for lime	21,550		10,775
- Cement	313,580		199,619
- Chemical	161,684		152,042
- Flux	438,313		274,152
- Whiting	10,588		17,116
Magnesite	235	140 tons	705
Opals	-		44,815
Phosphate rock	6,120	3,038 tons	6,076
Salt	303,893		607,786
Silica	17,942		12,170
Sillimanite (incl. Kyanite and Fibrolite)	967		6,012
Talc and soapstone	16,870	9,088 tons	42,405
TOTAL			2,603,691