1947

NEW ZEALAND

STATE COAL-MINES

(REPORT ON THE WORKING OF) FOR THE YEAR ENDED 31ST MARCH, 1947

Prepared in accordance with the requirements of Section 184 of the Coal-mines Act, 1925

REPORT

BY THE HON. A. McLAGAN, MINISTER OF MINES

MR. SPEAKER,—

I have the honour to present to Parliament the Balance-sheet, Statement of Accounts, and reports on the operations of the State Coal-mines for the year ended 31st March, 1947.

The gross output of the State coal-mines for the year ended 31st March, 1947, was 1,097,273 tons, an increase of 72,336 tons when compared with the year ended 31st March, 1946.

Output at the Liverpool Colliery decreased by 22,031 tons to 100,077 tons. The bulk of the output was obtained from pillar-extraction in the Morgan Rise and Kimbell West sections.

The output at the Strongman Colliery was 99,329 tons, compared with 100,275 tons for the previous year. All coal was won from developing sections.

The Blackball Colliery showed a decrease in output of 1,387 tons. Adverse mining conditions still pertain at this colliery and the coal is friable. Although there has been no substantial improvement in the mining conditions mentioned last year, the output at this colliery was well maintained.

An increase in output of 4,800 tons was recorded at the Dobson Colliery, and the Superintendent reports that prospects for the future working of this mine are good for many years.

The total output from the Stockton State mines increased by 22,239 tons to 237,460 tons. The bulk of this increase was obtained from the E Hill opencast.

The Burke's Creek Colliery was taken over on the 3rd June, and the output from that date to the 31st March, 1947, was 13,550 tons. Since taking over the colliery much reconditioning has had to be done. Development work is now proceeding.

Development work at the Garvey Creek Mine is still proceeding and no output had been recorded up to 31st March, 1947.

Output at the Mossbank Colliery increased by 1,340 tons to 25,468 tons. During the year a new return airway was driven in stone, and this has resulted in improved ventilation in the mine.

By the 31st March all coal had been extracted from the Ohai Opencast. During the year 49,475 tons were produced, making 85,671 tons obtained from this opencast by the State.

At Wairaki No. 1 Mine, pillar-extraction was carried on during the year while the output from Wairaki No. 3 Mine was obtained from solid workings. An increase in output of 375 tons was recorded.

The output of the Wilton Colliery decreased by 8,715 tons to 79,937 tons. This colliery has been seriously affected by a shortage of labour following the revocation of the Industrial Man-power Emergency Regulations, and the bad winter caused numerous slips and washouts which affected output.

Work continued at the Kimihia Opencast No. 1, where 42,762 tons were produced, making the total output to date 123,031 tons. During the year Athey wagons and tractors were used to remove the unstable overburden, which was dumped outside the mine area. A start has been made on the building of a stop-bank round an area adjacent to the No. 1 Area and known as Kimihia No. 1 Extended. The new area is estimated to contain 450,000 tons of coal.

At the Glen Afton Opencast, weather again interfered with output. During the year 15,803 tons were produced, and approximately 8,000 tons remain to be extracted.

Work continued steadily at Kemp's Opencast, where 55,246 tons were produced.

The Mangapehi Mine suffered from shortage of man-power, and the output declined by 4,171 tons.

The decrease in output at the Waitawhena Opencast was due to the extremely wet weather experienced during the winter, which caused difficulties in stripping and transport.

Mining conditions at the Tatu Mine have shown an improvement during the year and a small increase in output has resulted. During the year further electrical plant was installed underground.

The Wangaloa Opencast produced 32,023 tons for the first complete year of operation.

OUTPUTS

A comparative statement of outputs for the last two financial years is shown hereunder :—

Mine.	Output, 1946–47.		Output, 1945–46.		Percentage Increase in Gross Output.	Percentage Increase in Net Output.
	Gross.	Net.	Gross.	Net.		
	Tons.	Tons.	Tons.	Tons.		
Liverpool	100,077	95,380	122,108	117,430	−18·04	−18·78
Strongman	99,329	96,680	100,275	98,420	− 0·94	− 1·77
James	..	..	39	39	..	..
Blackball	60,037	58,356	61,424	59,286	− 2·26	− 1.57
Mangapehi	53,940	51,549	58,112	56,014	− 7·18	− 7·97
Tatu	34,377	32,375	32,573	30,979	+ 5·54	+ 4·51
Wallsend	47,075	44,664	47,233	45,028	− 0·33	− 0·81
Dobson	59,380	57,806	54,580	53,047	+ 8·79	+ 8·97
Stockton	237,460	231,690	215,221	208,460	+10·33	+11·14
Mossbank	25,468	24,398	24,128	22,725	+ 5·55	+ 7·36
Wilton	79,937	75,154	88,653	83,651	− 9·83	−10·16
Wairaki	68,800	65,274	68,425	63,343	+ 0·55	+ 3·05
Burke's Creek*	14,454	13,575	..	..	..	..
Glen Afton Opencast ..	15,803	15,803	14,394	14,394	+ 9·79	+ 9·79
Kimihia Opencast	42,762	42,762	32,398	32,398	+31·99	+31·99
Kemp's Opencast	55,246	55,246	38,097	38,097	+45·01	+45·01
Ohai Opencast	49,475	49,475	35,492	35,492	+39·40	+39·40
Waitewhena Opencast ..	21,630	21,630	23,198	23,198	− 6·76	− 6·76
Wangaloa Opencast ..	32,023	32,023	8,587	8,587	..	..
Totals	1,097,273	1,063,840	1,024,937	990,588	..	..

* Colliery taken over on 3rd June, 1946.

SALES

The following table shows the total sale of State coal from the State mines as compared with the previous year and the average f.o.r. price realized by each mine, exclusive of subsidy :—

Mine.	Total Sales, 1946–47.	Total Sales, 1945–46.	Percentage Variation.	Average Price f.o.r. realized.
	Tons.	Tons.		s. d.
Liverpool	99,403	115,487	—13·93	19 6·53
Strongman	96,681	99,663	— 2·99	24 4·56
James	..	39	..	..
Blackball	58,714	58,663	+ 0·09	17 5·42
Mangapehi	51,381	56,012	— 8·27	19 2·76
Tatu	32,476	31,026	+ 4·67	21 11·80
Wallsend	44,618	46,756	— 4·57	22 11·99
Dobson	57,127	52,943	+ 7·90	24 1·69
Stockton	230,419	210,623	+ 9·40	21 2·24
Mossbank	24,363	22,713	+ 7·26	22 2·13
Wilton	75,039	83,479	—10·11	19 1·18
Wairaki	65,169	63,283	+ 2·98	22 0·56
Burke's Creek	13,503	..	..	25 8·63
Glen Afton Opencast	15,803	14,394	+ 9·79	22 8·87
Kimihia Opencast	42,762	32,398	+31·99	23 4·42
Kemp's Opencast	55,246	38,097	+45·01	20 9·52
Ohai Opencast	44,153	35,492	+24·40	25 4·84
Waitewhena Opencast	21,630	23,187	— 6·71	25 4·34
Wangaloa Opencast	32,023	8,587	..	17 10·25
Totals	1,060,510	992,842	..	..

The difference between the output shown in the previous table and sales is accounted for by (1) coal used on works, (2) waste, (3) opening and closing stocks.

OUTPUT PER MAN EMPLOYED

The following table shows (*a*) the output per calendar year per man employed underground and (*b*) the output per calendar year per man employed (underground and surface) :—

Mine.	1946.		1945.		1944.		1943.		1942.		1941.		1940.		1939.		1938.	
	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Liverpool	441	336	468	352	498	371	583	440	672	504	715	521	528	410	612	459	561	423
Strongman	564	403	538	394	545	393	627	451	711	463	694	475	579	390	281*	192	..	..
Blackball	421	351	538	416	509	391	545	394	595	419	772	326	350	179	84*	53	565	314
Wallsend	357	282	415	329	346	290	422	352	478	369	466	356	414	326	500	394	496	394
Dobson	316	257	333	271	382	318	418	349	549	453	540	443	517	423	463	390	486	400
Wilton	557	398	639	456	669	478	658	471	606	459	834	613	789	608	686	539	678	549
Wairaki..	960	686	866	624	924	647	955	669	1,309	804	800	561	720	538	714	567	674	525
Mossbank	854	592	719	544	727	546	695	521	616	441	523	316	..	..	..	..	..	..
Mangapehi	553	434	533	428	683	524	714	550	722	534	622	442	587	339*	809	589	739	554
Tatu	505	310	508	311	481	303	482	306	596	364	341	199	458	276	..	..	..	..
Stockton	764	509	655	451	731	438	633	418	782	520	812	547	852	576	811	552	828	557
Burke's Creek	371	272†	..	..	750	531	565	442	624	456	655	476	528	392	773	560	1,144	735

* Mine worked portion of year only. † Separate output returns for Burke's Creek not available for 1945.

NOTE.—Some of the high outputs per man employed prior to 1944 are due to slack being raised from dump and credited to output.

Mine.	1937.		1936.		1935.		1934.		1933.		1932.		1931.		1930.	
	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.	Underground.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Liverpool	560	417	536	396	556	408	407	304	388	289	392	290	481	348	552	397
Strongman	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blackball	600	437	478	328	713	444	476	346	654	444	932	607	451	259	392	319
Wallsend	587	456	566	442	575	430	446	345	520	389	426	333	430	340	501	389
Dobson	481	388	543	426	428	358	401	331	408	341	411	348	278	231	450	377
Wilton	656	526	595	468	753	580	742	554	488	395	903	613	461	373	359	227
Wairaki	543	412	721	463	764	562	702	520	656	410	261	208	631	454	564	420
Mossbank	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mangapehi	719	629	1,135	883	530	441	40	11	..	..	..	..	..	..	..	..
Tatu	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stockton	895	573	714	460	631	388	587	356	606	371	558	362	548	351	771	491
Burke's Creek	867	585	764	540	574	402	569	416	415	308	311	235	381	288	301	205

SCREENING OF COAL

The following table shows the percentage of coal sold as unscreened and the results obtained from the screening of the balance of the output:—

Mine.	Percentage sold as Unscreened.	Percentages of Screened, Nuts, and Small obtained from Coal screened.	
		Screened.	Small.
Liverpool	99·58	6·67	93·33
Strongman	9·88	81·25	18·75
Dobson	4·13	80·07	19·93
Wallsend	5·16	70·28	29·72
Blackball	7·81	29·76	70·24
Stockton	22·52	58·00	42·00
Mossbank	..	66·95	33·05
Burke's Creek	27·04	71·53	28·47
Kemp's Opencast	..	58·81	41·19
Waitewhena	..	55·66	44·34
Glen Afton	..	54·69	45·31
Kimihia Opencast	..	68·74	31·26
Wairaki Opencast	..	68·14	31·86
Bar 20	6·27	77·50	22·50
Wangaloa	..	77·00	23·00

Mine.	Percentage of House, Domestic, Kitchen, and Slack (North Island Grading).			
	House.	Domestic.	Kitchen.	Slack.
Wilton	..	51·12	..	48·88
Mangapehi	11·81	..	33·31	54·88
Tatu	..	49·11	..	50·89

ACCIDENT INSURANCE

The State Coal-mines carries its own compensation risk, provision being made in the accounts, which are debited with premiums at the rate of £5¼ per cent. on colliery wages and £2 per cent. on depot wages. The Insurance Working Account shows a surplus of £24,576 5s. 1d. on the year's operation, and this amount brings the total of the Accident Insurance Reserve Account at 31st March, 1947, to £79,713 8s. 5d.

The cost of claims percentage on wages paid amounted to £2 17s. 9d., as compared with £3 3s. 11d. for the previous year, the average cost of each claim being £24 10s. 7d. compared with £25 11s. 1d. during the 1945–46 financial year.

The DISTRICT MANAGER, New Zealand State Coal Mines, Ohai, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,— 16th April, 1947.

I have the honour to submit my report on the workings of the Mossbank State Mine, the Bar 20 Opencast, and the Wairaki State Mine for the year 1st April, 1946, to the 31st March, 1947.

MOSSBANK COLLIERY

Coal-winning.—The gross output for the year was 25,468 tons 5 cwt. 2 qr., an increase of 1,340 tons 11 cwt. when compared with the figures of the previous year. After allowing for waste (117 tons 4 cwt. 1 qr.) and the quantity used on works (952 tons 14 cwt. 1 qr.), there remained for disposal a net output of 24,398 tons 7 cwt.

The following statement shows details of coal disposed of during the year :—

	Tons	cwt.	qr.
1st April, 1946—			
Stocks in yard	..		
Add net output for year	24,398	7	0
31st March, 1947—			
Less stock in yard	..		
Total disposed of	24,398	7	0

Disposals

	Tons	cwt.	qr.	
Railed	24,141	17	0	
Local and mine sales	5	0	0	
Workmen and free issues	251	10	0	
				24,398 7 0

The gross output from the colliery since taken over by the State on 2nd October, 1944, totals 61,415 tons 4 cwt.

Days worked.—The Mossbank Colliery worked 235½ days out of a possible 242 ordinary working-days. In addition, the colliery worked 13 back Saturdays and 5 statutory holidays, making the total days worked 253½. The difference between the days worked and the possible number of ordinary working-days is accounted for as follows : 1 day, Easter Tuesday ; 2 days, funerals of ex-members of Miners' Union ; 2½ days, power failures ; 1 day, fall in return airway.

Employees.—In connection with coal-winning, the average number of persons engaged in and about the mine was 44 men and 1 boy, made up as follows—Underground : coal-hewers, 15 ; deputies, shiftmen, and truckers, 19. Surface : 10 men and 1 boy.

Daily Output.—The average daily output was 100 tons 9 cwt. and the coal-hewers' average daily output was 7 tons 15 cwt., as compared with 96 tons 7 cwt. and 7 tons 8 cwt. respectively for the previous year.

Deficiencies.—No payments were made under the minimum-wage clause.

Coal-hewers' Average Daily Earnings.—The coal-hewers' average daily earnings (gross) were £3 0s. 3d., and after deducting stores (explosives) their net return was £2 15s. 4d., an increase of 10d. per day when compared with the previous year.

Accidents.—Only a few minor accidents occurred during the year under review.

Stone-dusting.—This work was done regularly throughout the year.

Underground Workings.—During the year development work was completed in the North-west Dip Section and in the Laybye South Level. In both areas splitting of the coal-seam by stone intrusions and the convergence of major faultings adversely affected the quality and thickness of coal to such an extent that development work was stopped and the extraction of pillars commenced in the latter half of the year. In the North-west Dip the seam thinned to 1 ft. and terminated on a belt of disturbed ground indicated as a wash-out. Similar conditions were encountered in the South Level, with progressive widening of vertical intrusions of conglomerate. The North-west Dip was advanced 5 chains and the South Level 6 chains during the first six months of the year.

Pillar-extraction was completed in No. 2 South-east Panel and the area subsequently sealed off on account of heating in a fall of coal and stone in the panel airway. In the South-west Level two dips driven to the south-west proved the major upthrow fault between the Level and the Laybye Section.

A new return airway driven in stone for 258 ft. from the upper mine workings to the original return airway at a point approximately 4 chains from the ventilating-fan was completed and was in use in December. The new airway eliminated 18 chains of the original airway which overlay the coal-seam, and resulted in improved ventilation of the mine. The coal generally was of good quality with an average thickness of 14 ft.

Plant.—All plant operated satisfactorily and repairs and maintenance were efficiently attended to by the engineering staff.

Bar 20 Opencast Mine

Coal-winning.—The net output for the year was 49,474 tons 13 cwt., an increase of 13,982 tons 6 cwt. when compared with the figures for the previous year. The following statement shows details of coal disposed of during the year:—

	Tons	cwt.	qr.
1st April, 1946—			
Stocks in yard	..		
Add net output for year	49,474	13	0
31st March, 1947—			
Less stock in dump (dross)	5,300	0	0
Total disposed of	44,174	13	0

Disposals

	Tons	cwt.	qr.	
Railed	42,004	15	0	
Local and mine sales	2,079	2	0	
Workmen and free issues	90	16	0	
				44,174 13 0

The net output from the colliery since operated by the Sate totals 85,671 tons 7 cwt.

Employees.—The average number of men employed at the opencast was 15.

Days worked.—The opencast worked on 214 days out of a possible 242 ordinary working-days. In addition, the colliery worked on 33 Saturdays, 4 statutory holidays, and 8 colliery holidays (during the Christmas period), making the total days worked 259. The difference between the days worked and the number of ordinary working-days is accounted for as follows: 2 days, Easter Tuesday and Wednesday; 1 day, funeral of ex-member of Miners' Union; 12 days, mechanical breakdowns; 13 days, flooding.

Workings.—Opencast operations continued throughout the year and all coal has now been exhausted. The larger portion of the output was won from an area previously occupied by Black Lion Tram-line, the surface buildings, and a section of the Ohai Stream, which was diverted on two occasions to permit the recovery of an additional 18,000 tons of coal.

In October, 1946, a flooding of the mine resulted in a stoppage for two weeks. Approximately 1,000,000 gallons of water was pumped from the mine during this period, but thereafter coal-production was continued to the end of the year without serious interruption.

The coal was of good quality, but high ash content of dross resulting from friable sandstone and conglomerate intrusions was responsible for 5,300 tons of unmarketable product.

Plant.—Screening and other plant operated satisfactorily and maintenance and repairs of all equipment were efficiently attended to by the engineering staff.

Wairaki Colliery

Coal-winning.—The gross output for the year was 68,799 tons 18 cwt. 1 qr., an increase of 374 tons 13 cwt. when compared with figures for previous year. After allowing for waste (1,115 tons 7 cwt. 3 qr.) and the quantity used on works (2,410 tons 5 cwt. 2 qr.), there remained for disposal a net output of 65,274 tons 5 cwt.

The following statement shows details of coal disposed of during the year:—

	Tons	cwt.	qr.
1st April, 1946—			
Stocks in yard	..		
Add net output for year	65,274	5	0
31st March, 1947—			
Less stock in yard	..		
Total disposed of	65,274	5	0

Disposals

	Tons	cwt.	qr.	
Railed	63,609	9	0	
Local and mine sales	1,160	15	0	
Workmen and free issues	504	1	0	
				65,274 5 0

The gross output from the colliery since taken over by the State on 27th January, 1945, totals 150,061 tons 5 cwt. 1 qr.

Days worked.—The Wairaki Colliery worked 236 days out of a possible 242 ordinary working-days. In addition, the colliery worked 15 back Saturdays and 5 statutory holidays, making the total days worked 256. The difference between the days worked and the possible number of ordinary working-days is accounted for as follows: 1 day, Easter Tuesday; 3 days, funerals of ex-members of Miners' Union; 2 days, disputes (1 day *re* back-Saturday work, 1 day *re* truckers).

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 88 men and 3 boys, made up as follows—Underground: coal-hewers 36; deputies, shiftmen, and truckers, 31. Surface: 21 men and 3 boys.

Daily Output.—The average daily output was 268 tons 15 cwt. and the coal-hewers' average daily output was 8 tons 5 cwt., as compared with 270 tons 9 cwt. and 8 tons 2 cwt. respectively for the previous year.

Deficiencies.—No payments were made under the minimum-wage clause.

Coal-hewers' Average Daily Earnings.—The coal-hewers' average daily earnings (gross) were £3 4s. 5d., and after deducting stores (explosives) their net return was £2 18s. 11d., an increase of 1s. 4d. per day when compared with the previous year.

Accidents.—One serious accident and several minor accidents occurred during the year under review.

Serious Accidents.—On the 1st October, 1946, a miner suffered a fractured pelvis by falling coal.

Stone-dusting.—This work was done regularly throughout the year.

Underground Workings.—No. 1 Mine: Pillar-extraction was carried out from the Dip Section, the Crosscut Section, and No. 1 Section. The average thickness of the seam in the Dip and Crosscut Sections is 17 ft., and in No. 1 Section it is 10 ft. There is only a small quantity of coal remaining to be extracted from the Dip and Crosscut Sections.

No. 3 Mine: Development and solid workings only were driven at this mine.

No. 6 Section: The development of this section was stopped because most of the working-places encountered faults, and it was decided to transfer the remaining miners to sections lower down the mine. The average thickness of the seam is 28 ft.

No. 8 Section: The main level after having been driven 2·5 chains struck an upthrow fault cutting across the working-face at 45 degrees, and a place was turned away to follow the direction of the fault. Twelve pillars have been formed in the section, and development work is being continued. The average thickness of the seam is 28 ft.

Main Dip: The driving of the main dip was continued in stone and the coal-seam was reached on the south side of the 33 ft. downthrow fault. At this point, 40 chains from the mine mouth, a laybye was formed as the terminus of the main direct rope haulage.

No. 9 Section: The direction and amount of the dip of the seam altered beyond the last downthrow fault met with in the main dip, and from the end of the terminus laybye a subsidiary dip was set away in coal to develop No. 9 Section. This dip has been driven 5 chains and it is within 2 chains of the boundary between the Star and Wairaki Mines. At this point the bottom 6 ft. of the seam has become very stony, but the remaining 18 ft. is of good quality, as proved by a borehole. Development work is being continued.

No. 10 Section: This section was turned away to the rise side of No. 9 Section. The level had been driven only 2·5 chains when it struck a downthrow fault running at an angle of 45 degrees across the face. A place was turned away to follow the direction of this fault. Three rise headings are now being driven parallel to the Ohai-Nightcaps Road barrier. The average thickness of the seam is 26 ft.

Plant.—The sirocco fan was transferred from the No. 1 Mine to No. 3 Mine and is running satisfactorily. A new elevator belt replaced the one worn out on the screens.

Fire Stoppings.—All fire stoppings have been maintained in good order.

Dangerous Heatings.—No heatings occurred during the year.

I have, &c.,

J. McARTHUR, District Manager.

The SUPERINTENDENT, State Coal-mines, Greymouth, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,— 29th May, 1947.

I have the honour to submit my annual report on the workings of the Liverpool, Strongman, Blackball, Wallsend, and Dobson State Coal-mines for the year ended 31st March, 1947.

LIVERPOOL COLLIERY

Coal-winning.—The gross output for the year was 100,076 tons 17 cwt., a decrease of 22,030 tons 14 cwt. when compared with the figures for the previous year. After allowing for waste (1,058 tons 17 cwt.) and the quantity used on works (3,638 tons), there remained for disposal a net output of 95,380 tons.

Taking into account the stocks at the beginning and end of the year, the following statement shows details of the coal disposed of during the year:—

	Tons	cwt.	qr.	Tons	cwt.	qr.
1st April, 1946—						
Stock in bin and yard	4,813	6	3			
Stock on wharf	609	3	0			
				5,422	9	3
Add net output for year ..	..			95,380	0	0
				100,802	9	3
31st March, 1947—						
Less stock in bin and yard ..	875	12	2			
Less stock on wharf	88	18	2			
				964	11	0
Total disposed of ..	..			99,837	18	3

Disposals

	Tons	cwt.	qr.			
Shipped	56,946	14	0			
Railed to Canterbury, &c. ..	36,464	9	2			
Railway sales	591	8	3			
Local and mine sales	4,721	3	3			
Sales to workmen and free issues ..	1,114	2	3			
				99,837	18	3

The gross output from the colliery since its inception totals 4,269,056 tons 8 cwt.

Days worked.—The colliery worked 235 days out of a possible 242 ordinary working-days. In addition, the colliery worked 3 substituted statutory holidays, making the total days worked 238. The difference between the ordinary days worked, 235 and the possible number of working-days is accounted for as follows: 1 day, power failure; 1 day, fall of stone on railway-line; 1 day, heating in mine; 1 day, miners did not work; 2 days, death and funeral of workmen; 1 day, dispute *re* back-shift truckers.

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 300 men and 15 boys, made up as follows—Underground: coal-hewers, 77; deputies, shiftmen, and truckers, 162. Surface: 61 men and 15 boys.

Coal-hewers' Average Daily Earnings.—The coal-hewers' average daily earnings (gross) were £3 2s., and after deducting stores (explosives) their net return was £2 19s. 6d., an increase of 1s. 6d. per day when compared with the previous period.

Daily Output.—The average daily output was 420 tons 10 cwt. and the coal-hewers' average daily output was 6 tons 2 cwt., as compared with 555 tons 1 cwt. and 7 tons 4 cwt. respectively for the previous year. The total number of hewer shifts for the year was 16,600.

Deficiencies.—There were no payments made under the minimum-wage clause during the year.

Accidents.—In addition to numerous accidents of a minor nature, 1 fatal accident occurred in the Liverpool Colliery. On 10th March, 1947, a shiftman was buried by a fall of coal in the Anderson East, sustaining injuries from which he died.

Stone-dusting.—Work under this heading was continued during the year. The number of samples taken from the Liverpool Colliery and analysed was 534. In addition, 110 samples from co-operative mines and 214 samples of coal from other State coal-mines were also analysed.

Underground Workings.—The greater portion of the output from this colliery has been won from pillar-extraction in the Morgan Rise sections and Kimbell West Section. Considerable difficulty has been experienced in this pillar work owing to the slow rate of extraction and the necessity of having to drive through old places which have fallen since the first workings.

A large amount of development has been carried out in the Morgan Seam to the dip of the original Morgan East and West levels.

The Morgan East Dip was driven a distance of approximately 30 chains. A panel was opened out 16 chains to the dip in a northerly direction, which is standing in good clean coal 20 ft. to 25 ft. in thickness.

A panel at the same level was developed in a westerly direction which proved the coal-seam to be split into three seams of varying thicknesses.

The lower part of the Morgan East Dip workings was connected from the main drive by Hadcroft's stone drive to be used as a haulage road for the coal. Further development has been carried to the dip to a distance of a further 11 chains.

A dip and return dip have been driven from the Morgan West level a distance of 14 chains. The coal-seam at the face is 20 ft. to 25 ft. thick. The upper 6 ft. to 7 ft. carries stone bands, but the lower 16 ft. to 18 ft. is clean coal.

An examination has recently been made of the sealed fire area in the Kimbell West level. It appears that the old fire is dead, and arrangements are being made to extract the pillars left in this section.

Strongman Colliery

Coal-winning.—The gross output for the year was 99,329 tons 9 cwt., a decrease of 945 tons 15 cwt. when compared with the figures for the previous year. After allowing for waste (2,142 tons 9 cwt.) and the quantity used on works (507 tons), there remained for disposal a net output of 96,680 tons.

Taking into account the stocks at the beginning and end of the year, the following statement shows details of the coal disposed of during the year:—

	Tons	cwt.	qr.	Tons	cwt.	qr.
1st April, 1946—						
Stock in bin and yard	972	15	0			
Stock on wharf	886	7	3			
				1,859	2	3
Add net output for year ..	96,680	0	0			
Add surplus stocks	104	1	0			
				96,784	1	0
				98,643	3	3
31st March, 1947—						
Less stock in bin and yard ..	..					
Less stock on wharf	226	18	1			
				226	18	1
Total disposed of	..			98,416	5	2

Disposals

	Tons.	cwt.	qr.			
Shipped	66,340	14	3			
Railed to Canterbury, &c.	15,202	6	1			
Railway sales	5,321	10	2			
Local and mine sales	7,837	8	0			
Sales to workmen and free issues ..	3,714	6	0			
				98,416	5	2

The gross output from the colliery since its inception totals 717,189 tons 3 cwt.

Days worked.—The colliery worked 232 days out of a possible 242 ordinary working days. In addition, the colliery worked 3 substituted statutory holidays, making the total days worked 235. The difference between the ordinary days worked, 232, and the possible number of working-days is accounted for as follows: 1 day, power failure; 2 days, slip on access road; 1 day, football match; 1 day, miners did not work; 1 day, dispute *re* pillars; 2 days, objection to employment of a labourer; 2 days, death and funeral of workman.

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 236 men and 6 boys, made up as follows—Underground: coal-hewers, 68; deputies, shiftmen, and truckers, 108. Surface: 60 men and 6 boys.

Coal-hewers' Average Daily Earnings.—The coal hewers' average daily earnings (gross) were £3 2s. 4d., and after deducting stores (explosives) their net return was £2 18s. 3d., an increase of 5s. 4d. per day when compared with the previous period.

Daily Output.—The average daily output was 422 tons 14 cwt. and the coal hewers' average daily output was 6 tons 18 cwt., as compared with 439 tons 16 cwt. and 7 tons 6 cwt. respectively for the previous year. The total number of hewer shifts for the year was 14,341.

Deficiencies.—There were no payments made under the minimum-wage clause during the year.

Accidents.—No serious accidents were reported at the Strongman Colliery during the year.

Stone-dusting.—Work under this heading was continued during the year. The total number of samples taken from the Strongman Colliery and analysed was 386.

Underground Workings.—All the coal from this mine has been won from developing places in the following sections: No. 2 North Heading, No. 3 North Heading, No. 1 South Dip in the No. 2 Seam, and the dip section from No. 1 North Heading in the No. 3 Seam.

No. 2 North: This section has been developed to the rise of the main drive, a distance of 40 chains. The section is approximately 20 chains wide and lies between the Armstrong and Doherty Faults. The coal-seam in this section is from 18 ft. to 22 ft. thick and is of very good quality. The workings have passed by No. 4 borehole and are approaching No. 3 borehole. These boreholes show an upper seam approximately 140 ft. vertical above the present workings 10 ft. to 15 ft. thick.

No. 3 North: This section has been developed 22 chains to the rise of the main heading. The section is only 10 chains wide and lies between the Doherty and Bob Faults. The estimated throw of the Doherty Fault near the top of the heading appears to be in the vicinity of 95 ft. vertical. This displacement from the main heading is increased from 35 ft. to 95 ft. If this increase is maintained, it appears that it will be possible to cross from No. 2 Seam in this section to No. 1 Seam in the No. 2 North Section. More information is required before a final decision can be made.

No. 1 South Dip: This area was developed to the dip of the main No. 2 South Heading. After being driven a distance of 13 chains, the dip struck a fault and a section was developed to the South in No. 2 Seam. The level to the south was carried on 15 chains, when it was stopped, the coal-seam thinning to less than 6 ft. and carrying a number of stone bands.

Dip Section (Bottom Seam): This dip was driven from the No. 1 North Heading to the No. 3 Seam, and it is in the same block of country as the No. 3 North Heading in the No. 2 Seam. The dip was driven 20 chains when it struck the Bob Fault. A section to the rise is being developed, also a section to the dip. The places to the rise are now carrying stone bands. The places to the dip are in good clean coal 12 ft. thick.

Blackball Colliery

Coal-winning.—The gross output for the year was 60,036 tons 15 cwt., a decrease of 1,386 tons 19 cwt. when compared with the figures for the previous year. After allowing for waste (1,330 tons 13 cwt.) and the quantity used on works (350 tons), there remained for disposal a net output of 58,356 tons 2 cwt.

Taking into account the stocks at the beginning and end of the year, the following statement shows details of the coal disposed of during the year:—

	Tons	cwt.	qr.	Tons	cwt.	qr.
1st April, 1946—						
Stock in bin and yard	1,850	4	1			
Stock on wharf	..					
				1,850	4	1
Add net output for year and surplus stock taken on charge (204 tons 11 cwt. 3 qr.) ..	..			58,560	13	3
				60,410	18	0
31st March, 1947—						
Less stock in bin and yard ..	1,194	18	0			
Less stock on wharf	7	1	0			
				1,201	19	0
Total disposed of	..			59,208	19	0

Disposals

	Tons.	cwt.	qr.			
Shipped	25,529	11	0			
Railed to Canterbury, &c.	18,392	10	0			
Railway sales	9,397	9	0			
Local and mine sales	4,522	19	0			
Sales to workmen and free issues ..	1,366	10	0			
				59,208	19	0

The gross output from the colliery since it was taken over by the State Coal-mines on 5th July, 1941, totals 284,803 tons 12 cwt.

Days worked.—The colliery worked 237 days out of a possible 242 ordinary working-days. In addition, the colliery worked 16 back Saturdays, 2 statutory holidays, and 3 substituted statutory holidays, making the total days worked 258. The difference between the ordinary days worked, 237, and the possible number of working-days is accounted for as follows: 2 days, union meetings; ½ day, break in haulage; ⅝ day, power failures; ⅝ day, West Coast *v.* England football match; 1 day, fault in bathhouse boiler; ¼ day, election.

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 169 men and 4 boys, made up as follows:—Underground: coal-hewers, 51; deputies, shiftmen, and truckers, 91. Surface: 27 men and 4 boys.

Coal-hewers' Average Daily Earnings.—The coal-hewers' average daily earnings (gross) were £2 10s. 8d., and after deducting stores (explosives) their net return was £2 7s. 6d., a decrease of 6d. per day when compared with the previous period.

Daily Output.—The average daily output was 232 tons 14 cwt. and the coal-hewers' average daily output was 5 tons 14 cwt. 1 qr., as compared with 232 tons 13 cwt. and 6 tons 16 cwt. respectively for the previous year. The number of hewer shifts for the year was 10,510.

Deficiencies.—The total amount paid under the minimum-wage clause was £144 8s. 10d.

Accidents.—In addition to numerous accidents of a minor nature 1 serious accident occurred on 19th December, 1946, when a shiftman sustained a fracture of the right ankle.

Underground Workings.—The whole of the mine is on double shift. Five pairs have been engaged extracting pillars, sixteen pairs developing in machine-cut places, and five pairs developing in pick places.

Continual undulations and numerous thinnings in the seam continue to hamper development and make it impossible to concentrate the miners and reduce haulage and trucking personnel. Moreover, excessive power in the form of winches, pumps, &c., is utilized. Extremely wet conditions in the working-places with the consequent short hours explains the particularly low output.

No improvement whatever has been achieved with the screen-coal percentage, which for the year has averaged approximately 30 per cent. The coal continues to be very soft and friable when mined, and present indications are that this percentage may be even lower during the coming year. A larger proportion of ½ in. screen plates were installed during the year, but no worth-while improvement was noticeable.

Crow's Nest Section: Early in the year pillar-extraction was commenced here, as the whole of the section was surrounded by thin coal. Good working-conditions and high percentage of extraction has been obtained. No extra water whatever has resulted from pillaring.

Dunn's Dip: At present eight pairs are developing with the Korfmann machine. This dip has been driven 8½ chains in a southerly direction during the year and is working coal around No. 1 Bore. Coal thickness varies up to 20 ft. and quality, on the whole is good. Undulations and thinning have seriously affected this section. All of these places are generally wet time. It has been intended to connect up this section with the Main and Tail Section so that by extending the endless rope better haulage could be provided. Thin coal, however, has been encountered when driving both from the Main and Tail side and the Dunn's Dip side, so that this scheme may have to be abandoned. Four chains of this connection remain to be driven.

Main and Tail Section: At present four pairs are developing in pick places. During the year these two main south headings were each driven 3 chains through barren ground. High coal was proved and the section opened up with the Korfmann cutter. This high coal, however, only extended for 2½ chains, when the seam again thinned. The places were persevered with and driven 3½ chains at right angles to each other through coal varying from 4 ft. to 6 ft. thick. It has been necessary to keep the middle stone for a roof, and it will be difficult to keep these places open long as the stone is 10 ft. thick and will eventually disintegrate with the water and run as a slurry. All places are very wet. Although being continued, the prospects for this area are at present very poor indeed. If coal should be found in this direction, a major job would have to be faced in brushing through the various undulations and thinnings, and in all probability the middle stone would eventually have to be entirely filled out in order to maintain a haulage road and return airway.

Sump Dip: Ten pairs developing with the Jeffrey coal-cutter. This dip has been driven during the year 8½ chains in a westerly direction parallel to the Main No. 1 Dip and is now 9½ chains in advance of the latter. This section also has been badly retarded with thinnings and undulations. In the panel the levels on the right have all struck a floor roll which is cutting back towards the dip itself, so that each level has stopped 1 chain shorter than the previous one. All of these places are extremely wet and the ground is very heavy. Two headings have been started in a southerly direction off this section and are in line with, and only 1 chain away from No. 2 Bore. This bore is shown as "no coal," but present coal is of good quality and in the vicinity of 20 ft. thick. These two headings have also been extended on the other side of the section to within 40 yards of the Main No. 1 Dip face and will be connected as soon as No. 1 Dip is dewatered. They will then allow much closer haulage, which will be provided by an extension of the present endless-rope system. These headings should also open up a reasonably sure area of rise coal which lies to the dip of the abandoned South Dip.

Ventilation: During the year a concrete overcast was completed and the ventilation changed from a single circuit to two equal splits. The large amount of blackdamp given off in our dip workings requires a high velocity, and a 45 in. booster fan has been installed in the region of lowest pressure in each split for this purpose. A ventilation survey has been carried out, which proves that the greatest restrictions are still in the main return. Two men have been engaged the whole year straightening, enlarging, and retimbering this airway, but a large amount of work remains before it is in good order. Reinforced-concrete legs with railway rails for bars are being used here and appear to be very successful. The sections will quickly outgrow the effectiveness of booster ventilation, and the question of a larger main fan will soon have to be considered.

Pumping: Preparations have been completed for construction of a larger sump with a capacity of 1,250,000 gallons in what is known as "the old sump section." A level gangway, 4 chains long, has been built and a large concrete well. The former allows a short straight suction into the lowest part of the area, and the wall on which the pump will sit, is equipped with doors, &c., for easy cleaning. All the water from the dip workings will be gathered in this sump and pumped to the main borehole sump, and from there pumped up the borehole as at present. As there is only two and a quarter hours standage in the borehole sump, provision is being made to use the delivery from the new sump as a syphon so that the water from the borehole sump can be brought back into the larger standage area in the event of a long power failure. Although the mine continues to have excessively wet working-places, the total quantity of water remains constant, proving that the water follows the working-faces.

Early in the year No. 2 North Section was stopped because of excessive water. Small inrushes were occuring in all the working-places, and it was considered wiser to stop the section rather than risk another large inrush similar to that in No. 1 North. Since being stopped great difficulty has been experienced in keeping the main road open for a waterway. A concrete-block tunnel is at present being built through one particularly bad portion. It is essential that this water has a free passage, as if a blockage occurred it would flood the dip workings below.

It is worth noting the large amount of shift-work required simply to deal with water in this mine. For instance, outlets for water alone have to be maintained from No. 1 and No. 2 North Sections and also the old Blackball Mine. Without considering ordinary face pumping, six pumping sumps have to be kept in repair and regularly cleared of silt. Altogether, thirteen pumps are in actual use underground.

Installations: During the year a large concrete substation has been built and transformers, &c., installed. Power was connected in August, and a marked improvement has been achieved in face voltage. The high-tension power is fed through a borehole cable at 10,000 volts and transformed underground to 400 volts. The building has two compartments, high-tension end and low-tension end.

A new 50 h.p. endless haulage has been installed in the main south headings, and is so situated that it can also be used down No. 1 Dip when the latter is dewatered. The haulage is operated by automatic bell-stop and thrustor brake, and this has eliminated two winchmen. A considerable saving in skip repairs and rope has been made with this installation. Under the old main and tail system a $\frac{5}{8}$ in. rope lasted six weeks; the present $\frac{7}{8}$ in. rope should last one year.

A new 30 h.p. direct-haulage winch has been installed at the top of the Sump Dip to replace a small 15 h.p. slow-speed winch. A new 20 h.p. main and tail winch has been installed to handle the coal from the top of the Sump Dip to the endless-rope road. This haulage works exceptionally well on an undulating and winding roadway, replacing two small winches and winchmen.

A new 20 h.p. direct-haulage winch has been installed at the top of Dunn's Dip to replace an old 10 h.p. slow-speed winch.

All these sections are now equipped with haulage facilities which would handle more coal if the undulations and thinnings in the seam would allow us to concentrate our miners to a greater extent.

Surface: A stone chute has been erected at the delivery end of the underground conveyer belt and disposes of stone, &c., straight into the creek below. Instead of being compelled to stow all stone underground, it can now be sent to the surface during the ordinary coal-producing shift and dumped without requiring additional labour. This is a big advantage in a mine which has so many thinnings to contend with.

A new welding-shed has been erected as an extension to the main fitting-shop. This is a big improvement, as the arc does not now inconvenience the other workmen.

Summary: The difficult mining conditions due to excessive water and the changing nature of the seam make the maintaining of a steady output most difficult and it is impossible to forecast the future of any section from day to day. An example of this was the Main and Tail Section, which had four perfect places producing the highest outputs in the mine. Within one week every place struck thin coal with water pouring in, making the section unworkable from an output point of view. This happens continually, so that it is a struggle to have sufficient places on hand so that these low output places can be kept at a workable minimum. The two headings showing the most promise and working the best-quality coal are driving towards No. 2 Bore, which, as stated above, shows no coal.

Wallsend Colliery

Coal-winning.—The gross output for the year was 47,075 tons 4 cwt. 1qr., a decrease of 158 tons 4 cwt. 2 qr., when compared with the figures for the previous year. After allowing for waste (571 tons 1 cwt. 1 qr.) and the quantity used on works (1,840 tons), there remained for disposal a net output of 44,664 tons 3 cwt.

Taking into account the stocks at the beginning and end of the year, the following statement shows details of the coal disposed of during the year:—

	Tons	cwt.	qr.	Tons	cwt.	qr.
1st April, 1946—						
Stock in bin and yard	511	19	0			
Stock on wharf	165	4	0			
				677	3	0
Add net output for year ..		..		44,664	3	0
				45,341	6	0
31st March, 1947—						
Less stock in bin and yard ..	376	4	1			
Less stock on wharf		..				
				376	4	1
Total disposed of		..		44,965	1	3

Disposals

	Tons.	cwt.	qr.			
Shipped	27,196	0	2			
Railed to Canterbury, &c.	4,705	3	3			
Railway sales	10,874	0	3			
Local and mine sales	1,679	16	3			
Sales to workmen and free issues ..	510	0	0			
				44,965	1	3

The gross output from the colliery since it was taken over the by State Coal-mines on 22nd February, 1943, totals 216,683 tons 19 cwt. 2 qr.

Days worked.—The colliery worked 228¼ days out of a possible 242 ordinary working-days. In addition, the colliery worked 5 back Saturdays, 1 statutory holiday, and 3 substituted statutory holidays, making the total days worked 237¼. The difference between the ordinary days worked, 228¼, and the possible number of working-days is accounted for as follows: 8¼ days, monthly union meeting, &c.; 1 day, funeral of employee; 1 day, damaged loading-bank; ¼ day, football match; 1 day, gas accumulation; 2 days, fan stoppages due to power failures; ¼ day, election day.

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 138 men and 5 boys, made up as follows—Underground: coal-hewers, 39; deputies, shiftmen, and truckers, 75. Surface: 24 men and 5 boys.

Coal-hewers' Average Daily Earnings.—The coal-hewers' average daily earnings (gross) were £3 0s. 6d., and after deducting stores (explosives) their net return was £2 17s. 6d., an increase of 8s. 2d. when compared with the previous period.

Daily Output.—The average daily output was 198 tons 8 cwt. 2 qr. and the coal-hewers' average daily output was 6 tons 16 cwt. 3 qr., as compared with 200 tons 0 cwt. 2 qr. and 6 tons 8 cwt. 2 qr. respectively for the previous year. The total number of hewer shifts for the year was 6,881.

Deficiencies.—The total amount paid under the minimum-wage clause was £2 11s. 9d.

Accidents.—In addition to numerous accidents of a minor nature, 1 serious accident occurred on 9th October, 1946, when a shiftman was struck in the small of the back by a fall of side coal which resulted in him receiving a fracture of the spine in the right lumbar region.

Underground Workings.—No. 1 Dip: Six pairs have been engaged in finishing the development in this section and have now commenced splitting on the retreat. In the area between the roll and the fault a distance of approximately 3½ chains was driven until cut off by the two converging faults. A good deal of prospecting was done on the fault side of this area with negative results. Owing to the dusty nature of the coal in this section, only six hours per day have been worked for the greater portion of the period under review.

No. 2 Dip: One pair of miners has been engaged for the period brushing the dip as the water-level was lowered and latterly in driving the bottom level on the west side to the Taylorville Fault. The Korfmann machine has been in use in this place and is giving good results. The water has been removed from the whole of the No. 2 Dip and the pump shifted to the machine dip area, and this has been pumped down approximately 27 yards. The concrete-block stoppings have been erected down to this point and the machine level brushed into the top of the machine dip.

No. 1 Slant Dip: Owing to adverse roof conditions and to the slow rate of retreat, partly due to the working of six hours only due to the places being dusty, it has only been possible to keep four pairs in this section for the latter half of the year.

No. 2 Slant Dip: Three pairs of miners have been engaged in splitting the pillars on a line parallel to the barrier and have reached a point approximately half a chain on the outbye side of the old dip. Good results have been attained in this section owing to splitting commencing immediately the barrier was reached, in direct contrast to our experience in No. 1 Slant Dip, where the pillars had stood for a long time. A good deal of trouble has been experienced with the pumping in this section owing to the corrosive nature of the water to be pumped.

Extension Section: Six pairs now engaged in splitting in the retreat. Development was completed during the year owing to the low coal area cutting the section off. Splitting was commenced along the top airway, while a new main jig behind the present jig was constructed and a slant dip put down to work the two rows of pillars below the main level. Splitting is continuing on the retreat on the line of dip. A good deal of trouble and expense is occasioned by the continuous creep in these low workings and the slow rate of retreat, chiefly caused by shortage of men.

The new 6 in. compressed-air line has been installed and is proving beneficial.

The main return airway between No. 2 Dip and the bottom of the Upcast Shaft has been timbered and partially cleaned up, but a good deal more work still requires to be done here.

The new airway has been driven, and as soon as the undercast has been erected we will put it into commission.

One pair of miners has been engaged in driving a new airway between A Panel and the Slant Dip return, as the companion is closed along this stretch.

Dobson Colliery

Coal-winning.—The gross output for the year was 59,379 tons 17 cwt., an increase of 4,799 tons 17 cwt. 2 qrs. when compared with the figures for the previous year. After allowing for waste (1,341 tons 15 cwt. 2 qr.) and the quantity used on works (232 tons 4 cwt.), there remained for disposal a net output of 57,805 tons 17 cwt. 2 qr.

Taking into account the stocks at the beginning and end of the year, the following statement shows details of the coal disposed of during the year :—

	Tons	cwt.	qr.	Tons	cwt.	qr.
1st April, 1946—						
Stock in bin and yard	1,765	2	0			
Stock on wharf	211	2	0			
				1,976	4	0
Add net output for year ..	..			57,805	17	2
				59,782	1	2
31st March, 1947—						
Less stock in bin and yard ..	1,769	7	2			
Less stock on wharf	..					
				1,769	7	2
Total disposed of	..			58,012	14	0

Disposals

	Tons.	cwts.	qr.			
Shipped	33,787	5	0			
Railed to Canterbury, &c.	18,245	13	0			
Railway sales	3,767	18	0			
Local and mine sales	767	4	0			
Sales to workmen and free issues ..	1,444	14	0			
				58,012	14	0

The gross output from the colliery since it was taken over by the State Coal-mines on 22nd February, 1943, totals 244,024 tons 17 cwt. 2 qr.

Days worked.—The colliery worked 229¾ days out of a possible 242 ordinary working-days. In addition, the colliery worked 8 back Saturdays and 3 substituted statutory holidays, making the total days worked 240¾. The difference between the ordinary days worked, 229¾, and the possible number of working-days is accounted for as follows : 3½ days, union meetings ; 3 days, power failures ; 3 days, funerals of employees ; ¼ day, football match ; 1 day, dispute *re* jack-hammers ; 1 day, fault in signal system ; ¼ day, screen breakdown ; ¼ day, election.

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 194 men and 7 boys, made up as follows—Underground : coal-hewers, 46 ; deputies, shiftmen, and truckers, 115. Surface : 33 men and 7 boys.

Coal-hewers' Average Daily Earnings.—The coal-hewers' average daily earnings (gross) were £2 19s. 10d., and after deducting stores (explosives) their net return was £2 16s. 6d., an increase of 6s. 2d. per day when compared with the previous period.

Daily Output.—The average daily output was 246 tons 12 cwt. 3 qr. and the coal-hewers' average daily output was 6 tons 4 cwt. 2 qr., as compared with 239 tons 15 cwt. 2 qr. and 6 tons 8 cwt. 3 qr. respectively for the previous year. The total number of hewer shifts for the year was 9,544.

Deficiencies.—The total amount paid under the minimum-wage clause was £218 8s.

Accidents.—The usual number of minor accidents occurred at the colliery during the year, but there were none of a serious nature.

Underground Workings.—5 West : Completion of stone drive to give this section better haulage and ventilation. This section has been one of the best so far in the mine, but is now affected by some small faulting which originated in the 4 West Section. While this is not likely to be of serious dimensions, more information should be available before meeting the main Dobson Fault.

Main Dips: The main dips have been driven continuously during the year and have now changed to level grade. In fact, No. 2 Dip is now rising slightly and is within 5 chains of the borehole 252, which proved 10 ft. of good coal. On the west side of No. 2 Dip the No. 3 Dip, which is the main west return, has struck a downthrow fault. Eighteen feet was sunk on this fault, but did not find the bottom. It is now proposed to bore the fault with a diamond drill. This fault, running north and south, was first struck in the 5 West Section, where a dip extends down behind it in good coal. However, for haulage and ventilation reasons it must be negotiated on the main dips. It is the intention to extend the main endless ropeway to the point in No. 1 Dip where the grade levels out, and there make a permanent terminus. This point will be about 20 chains beyond the present terminus at No. 4 Level and will be the limit of the power of the existing haulage.

East Side: The No. 2 East Dip is still being developed, but no work has been done farther east, mainly on account of haulage and ventilation difficulties. The full pitch of the seam is now almost due north and south and is very steep, being about 1 in $1\frac{1}{2}$, and will require provision for both haulage and ventilation.

Ventilation: A contract has been let to enlarge the main return, and the work is now about three parts completed. When this is done, the fan will be speeded up by installing a 200 h.p. motor and a new V-belt drive. This should provide 40,000 cubic feet more ventilation than at present. All old sections have been sealed off and all possible air directed to the working-places, but as the places are 1,500 ft. below sea-level the temperatures in some of the places are high by New Zealand standards. Some form of auxiliary fan must eventually be adopted if places are to be worked to the rise in the steep East side.

Pumping: A new station and pump has been built at the bottom of the main stone drive. Electric cable has been laid to the first stage in No. 1 Dip, and an electric pump will soon replace the air-driven pump at this station and will relieve the demand on the compressed-air plant.

New Pumps: Three 4 x 6, three 6 x 8 plunger pumps, and one 16 x 8, all air driven, have been received during the year and are now mostly in use. There has been an increase in the amount of water pumped out of the mine, and an extra shift's pumping each week-end is necessary to keep the water down.

The use of air-driven drills for boring shotholes is now universal.

The prospects for the future working of this mine are good for many years.

I have, &c.,

C. J. STRONGMAN, Superintendent.

The DISTRICT MANAGER, State Coal-mines, Reefton, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,— 28th April, 1947.

I have the honour to submit my annual report on the workings of the Burke's Creek and Garvey Creek State Coal-mines and Wangaloa Opencast for the year ended 31st March, 1947.

BURKE'S CREEK COLLIERY

Coal-winning.—This colliery was acquired by the State on 3rd June, 1946. The gross output for the ensuing period ended 31st March, 1947, was 14,453 tons 10 cwt. After allowing for loss on measurement and waste (599 tons 18 cwt. 1 qr.) and the quantity used on works (278 tons 10 cwt.), there remained for disposal a net output of 13,575 tons 1 cwt. 3 qr.

Taking into account stocks on hand at the date of acquisition and at the end of the year, the following statement shows details of the coal disposed of during the period:—

3rd June, 1946—	Tons	cwt.	qr.	Tons	cwt.	qr.
Stock in bin and yard	..	..		..		
Add net output for period	..	..		13,575	1	3
Add surplus stocks taken on charge	..	..		96	6	0
				13,671	7	3
Less stock on hand	81	0	0			
Less stock on dump	40	0	0			
				121	0	0
Total disposed of	..	..		13,550	7	3

Disposals

	Tons	cwt.	qr.			
Shipped	326	3	3			
Railed to Canterbury, &c.	11,868	9	0			
Railway sales	8	1	0			
Local and mine sales	1,095	14	0			
Sales to workmen and free issues	252	0	0			
				13,550	7	3

The gross output of the colliery since its acquisition by the State on 3rd June, 1946, totals 14,453 tons 10 cwt.

Days worked.—During the period 3rd June, 1946, to 31st March, 1947, the colliery worked 200½ days out of a possible 201 ordinary working-days. In addition, the colliery worked 13 back Saturdays, and 5 statutory holidays, making the total days worked 218½. The difference between the ordinary days worked, 200½, and the possible number of working-days is accounted for as follows: 1 day shift (counted as half a day), fall on the main dip.

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 52 men and 3 boys, made up as follows—Underground: coal-hewers, 14; deputies, shiftmen, and truckers, 26. Surface: 12 men and 3 boys.

Coal-hewers' Average Daily Earnings.—The coal-hewers' average daily earnings (gross) were £2 7s. 7d. per day, and after deducting stores (explosives) their net return was £2 4s. 4d. per day.

Daily Output.—The average daily output was 66 tons 3 cwt. and the coal-hewers' daily output was 5 tons 6 cwt. The total number of hewer shifts for the period was 2,733.

Deficiencies.—The total amount paid under the minimum-wage clause was £12 13s. 10d.

Accidents.—One serious accident occurred at this colliery. On 11th March, 1947, a shiftman sustained a crushed foot, with subsequent amputation of first joint big toe, total second toe, and end joints third and fourth toes, as a result of his foot being run over by a loaded coal-truck.

Stone-dusting.—This work was carried out regularly in the dry portions of the mine.

Underground Workings.—Since this colliery was acquired by the State Coal-mines an endeavour has been made to maintain a moderate output and at the same time to recondition and develop the mine.

Development.—North-east Levels: From the Friction Dip, development levels have been driven to a distance of 16 chains to the north-east in coal of average thickness and good quality. At a distance of 14 chains from the new dip a sharp roll was encountered in the bottom level which, though it does not dislocate the seam, affected both the strike and dip. This level is now 6 chains past the line of the continuation of the Main Dip, and a rise heading in line with the Main Dip has been commenced which, when completed, will serve for the extension of the present main haulage.

The old Harris Dip, last worked in 1941, was dewatered, reconditioned, and connected through to the bottom level. This dip will be used as a haulage for coal from the east side of the Bottom Level Section until the Main Dip extension is completed.

Development to South-west: Prior to the mine being acquired by the State, development of the bottom south-west levels was stopped at 7 chains from the New Dip. The coal in this locality is soft and of inferior quality.

Development to the Dip North-west: A winch is now being installed in the bottom level to be used for sinking a prospecting dip in line with the main return heading.

Reconditioning.—Extensive repair work has been done in the Main Dip and the lower sections of the return airway. The former was widened, retimbered, and regraded to permit the use of a carriage for the transport of workmen.

Winches.—The 15 h.p. electric winch used for haulage from the Slant Dip Section was replaced by a 30 h.p. winch.

Pumps.—The installation of a new 3 in. seven-stage pump in the lower workings, along with the reconditioning of other installations, has eased the pumping problems of the mine.

Fires.—Three clay and block stoppings were put in early in the New Year to seal off a heating in the waste at the inbye end of the Slant Dip pillar section. In addition, four clay and block stoppings were erected to reinforce the existing stoppings of an old fire area.

Coal-production.—The output was obtained from development in the bottom north-east levels and from pillar-extraction in the Slant Dip Panel.

The colliery is now equipped and developed for an output at least 50 per cent. greater than can be obtained with the limited number of workmen available.

Surface.—A concrete winch-house was erected and a new 75 h.p. winch and a carriage for workmen installed for the Main Dip Haulage.

Buildings.—Army ration stores have been transported from Blenheim for re-erection at the mine and in Reefton as a mine store, district office, and garage respectively.

Railway.—The reconditioning of the mine railway was commenced early in the New Year. Preliminary surveys for the railway extension to the mine were completed and plans and estimates prepared for bins and screening plant.

Garvey Creek Mine

This mine is not yet in production.

Owing to the abnormally wet spring and early summer and the difficult country, the access road to the mine was not completed until December, consequently the erection of mine buildings and screens was not commenced until early in the New Year.

An extensive slip at the terminus together with unstable foundations necessitated a re-location of this portion of the access road, the re-siting of the mine buildings, screening-plant, &c., the driving of a short rock tunnel, and the construction of a sidling tramway.

A screening-plant is now installed; storage bins and mine buildings are in course of erection.

The clearing of debris along the outcrop of the vertical seam above the mine mouth on the north-west side of Garvey Creek was commenced early in the New Year. This work and also the construction of a sidling tramway between the outcrop on the south-east side of the creek and the screens have been delayed by bad weather and difficulty in obtaining suitable plant.

Four prospecting drives, two to the north-west and two to the south-east, were driven in the vertical seam in Garvey Creek. These drives and crosscuts driven from them have proved the seam in the vicinity of the proposed mine entrance to exceed 50 ft. in thickness from wall to wall. The coal in this locality is of good quality, of coking rank, and of varying degrees of hardness. On the north-west side of the creek the seam in the prospecting tunnels is intersected by a narrow zone of stone and dirt bands. This zone appears to thicken to the south-east and splits the seam in that direction. To the north-west irregular intrusions of stone and shale occur in various parts of the seam. This seam has been traced by surface prospecting for a distance of 34 chains north-west of Garvey Creek and for 10 chains to the south-east of the creek. The average thickness exceeds 25 ft., and with minor exceptions the coal is hard and of good quality. The dips vary from 60 to 90 degrees from the horizontal.

Sixteen men are employed on prospecting work, development, and the erection of plant.

Wangaloa Opencast

This opencast, which is operated by the Public Works Department on behalf of the State Coal-mines, produced 32,023 tons of coal.

The following report covers the operations of the opencast for the year ended 31st March, 1947.

Stripping.—The first line of stripping down the swamp has progressed, in spite of difficulties of weather and terrain, to the probable limit of opencast mining, and a start has been made on a second cut on the south side of the valley. Up to the present no back-filling to the open cut has been possible, but when this procedure becomes practical a consequent increase in stripping-rate and lowering of costs should follow.

Approximately 103,000 cubic yards of stripping has been excavated during the year, and at 31st March, 66,000 cubic yards of this was advance stripping, representing 42 per cent. of the stripping over approximately 50,000 tons of coal, roughly 12,000 tons of this coal being completely exposed.

These figures are necessarily only approximate, as a seam of mixed coal and mudstone of varying thickness lies over all the good coal. Of this seam, which attains up to 12 ft. of thickness, an average of 50 per cent. is saved as good coal by the use of drag-line and Marshall dump-car.

The figures of stripping have fluctuated considerably, the work being held up by the excessively wet spring, but this was compensated for by working long hours to take advantage of the long spell of dry weather in the autumn, when a peak output of 19,283 cubic yards was attained for March.

The main drainage scheme has been completed, and though future bad weather may delay stripping, coal-production should not be retarded, even though water still has to be pumped from the face.

Coal Output.—Monthly output of coal rose from 1,296 tons in March, 1946, to 3,452 tons in March, 1947, with a total output of 32,759 tons for the year.

During the year dross had to be stock-piled at the bins to the extent of 783 tons, but the total output is going forward at present and the balance on hand will probably be disposed of during the coming winter. No coal was extracted from Smaill's Lease during the year.

Plant.—Earth-moving plant on the job at 31st March included four D8 tractors, three with blades; four 12-cubic-yard carryalls; one 3½-cubic-yard carryall; two RD7 tractors, complete with blades; one D4 tractor with blade; one McD. tractor, 20 h.p., complete with blade; one rooter; one excavator drag-line, 1½ cubic yards capacity; one Diesel shovel, ½ cubic yard capacity; one Marshall dump-car; and, having regard to the conditions prevailing from time to time, this plant has handled the job satisfactorily.

Labour.—The number of men employed is 19, including face men, plant operators, and mechanics, apart from the 3 contract truck-drivers.

No labour hold-ups or absenteeism have been experienced, though time was lost during the Kaitangata coal strike, as no coal could be despatched on the company's siding.

Buildings.—A permanent camp to accommodate the miners has been erected on leasehold property in Kaitangata, and married quarters for the overseer have also been completed.

I have, &c.,
R. T. H. DALE, District Manager.

The DISTRICT MANAGER, State Coal-mines, Ngakawau, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,— 8th May, 1947.

I have the honour to submit my report on the workings of the Stockton State Mines for the year ended 31st March, 1947.

Output.—The gross output for the year from the Fly Creek and Webb Mines and the E Hill Opencast was 237,460 tons 4 cwt., an increase of 22,238 tons 19 cwt. 2 qr. when compared with the previous year. Gross outputs of the individual mines were as follows:—

	Tons	cwt.	qr.
Fly Creek Mine	38,804	8	2
Webb Mine	58,010	19	2
E Hill Opencast	140,644	16	0
	237,460	4	0

After allowing for waste (520 tons 4 cwt.) and coal used on works (5,250 tons), there remained for disposal a net output of 231,690 tons.

Taking into account the stocks at the beginning of the year, the following statement shows details of the coal disposed of during the year :—

	Tons	cwt.	qr.	Tons	cwt.	qr.
1st April, 1946—						
Stock on wharf	2,181	18	0			
Stock in bins and yard ..	1,252	4	3			
				3,434	2	3
Add surplus stock taken on charge	..			1,350	0	0
Add net output for year ..	..			231,690	0	0
				236,474	2	3
31st March, 1947—						
Less stock in bins and yard ..	1,792	7	1			
Less stock on wharf	1,067	10	0			
				2,859	17	1
Total disposed of ..	..			233,614	5	2

Disposals

	Tons	cwt.	qr.			
Shipped	159,665	9	0			
Railed	6,696	2	1			
Railway sales	47,639	6	1			
Local and mine sales	18,361	15	0			
Workmen and free issues ..	1,251	13	0			
				233,614	5	2

The gross output of the collieries since being taken over by the State on 1st July, 1944, totals 561,635 tons 3 cwt. 3 qr.

Days worked.—Fly Creek Colliery worked 230⅝ days out of a possible 242 days. In addition, the colliery worked 2 back Saturdays and 3 statutory holidays, making the total days worked 235⅝ days. The difference between the ordinary days worked, 230⅝, and the possible number of working-days is accounted for as follows : disputes, 8⅜ days ; no transport, 1 day ; football match, 1 day ; burnt-out motor, 1 day.

Webb Colliery (previously D Hill) worked 231¼ days out of a possible 242 days. In addition, the colliery worked on 2 back Saturdays and 3 statutory holidays, making the total days worked 236¼ days. The difference between the ordinary days worked, 231¼, and the possible number of working-days is accounted for as follows : disputes, 8¾ days ; no transport, 1 day ; burnt-out motor, 1 day.

E Hill Opencast worked 231⅝ days out of a possible 242 days. In addition, the colliery worked 12 back Saturdays and 3 statutory holidays, making the total days worked 246⅝. The difference between the ordinary days worked, 231⅝, and the possible number of working-days is accounted for as follows : disputes, 8⅜ days ; no transport, 1 day ; burnt-out motor, 1 day. (NOTE.—Only one motor was burnt-out, but it affected the three collieries.)

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 300 men and 20 boys, made up as follows—Underground : coal-hewers, 60 ; deputies, shiftmen, and truckers, 77. Surface : Open-cast machine operators and truck-drivers, 32 ; men, 131 ; boys, 20.

Coal-hewers' Average Daily Earnings.—Fly Creek Colliery : The coal-hewers' average daily earnings (gross) were £3 4s. 11d., and after deducting stores (explosives) their net return was £3 2s., an increase of 7s. 2d. per day when compared with the previous period.

Webb Colliery: The coal-hewers' average daily earnings (gross) were £3 10s. 4d., and after deducting stores (explosives) their net return was £3 4s. 7d., an increase of 7s. 11d. per day when compared with the previous period.

Daily Outputs.—Fly Creek Colliery: The average daily output was 164 tons 13 cwt. 2 qr. and the coal-hewers' average daily output was 7 tons 7 cwt. 2 qr., as compared with 225 tons 15 cwt. and 7 tons 1 cwt. 1 qr. respectively for the previous year. The total number of hewer shifts worked was 5,264.

Webb Colliery: The average daily output was 245 tons 11 cwt. and the coal-hewers' average daily output was 8 tons 9 cwt. 2 qr., as compared with 151 tons 11 cwt. and 7 tons 15 cwt. 2 qr. respectively for the previous year. The total number of hewer shifts worked was 6,843.

E Hill Opencast: The average daily output was 570 tons 5 cwt. 2 qr., as compared with 457 tons 15 cwt. 2 qr. for the previous year.

Accidents.—There were 132 accidents during the year, 4 of them being serious.

Underground Workings.—Fly Creek Mine: Operations were mainly confined to pillar-extraction in the South-west, No. 2, No. 4, and No. 5 Sections in excellent coal. In No. 2 Section extraction was completed. In the South Section, development continued in difficult heavy wet ground to the outer edge of the coal basin and extraction commenced. Extremely wet and unpleasant conditions were met with in the South and No. 5 Sections. In all other parts the working-places were wet, some extra wet from time to time.

In the East area, preparations have been made to introduce the hydro method of mining in the recovery of a large area of pillar coal, including the East opencast area and many pillars in and around the old Fire area. This system of work where the grades are so suitable and a plentiful supply of water available will ensure safer working-conditions for the men, much more economical working, and a very much higher percentage recovery than is possible with any other system of work.

Webb Mine: This new mine has developed satisfactorily. The main headings have advanced a further 14 chains—a total distance of 29 chains from the mine entrance—in good coal. Three panels have been formed to the south, providing good working-conditions for the men, also ensuring economy in coal winning and hauling.

The plan and arrangement of work in this mine has been laid out with a view to complete mechanization in the near future. Up until recently the coal was comparatively thin and for several chains the roof was very wet and heavy, having over 20 ft. of mudstone immediately above the coal, entailing very costly work in heavy timbering. The main headings have now advanced beyond the bad ground into thick coal (17 ft.), where conditions are much drier and ideally suitable for mechanized mining in all other respects. Bores ahead prove that the coal thickens to over 30 ft. in the line of development to a distance of 30 chains beyond the present heading faces.

In the Old Mine area, development was completed to the boundary of the barren belt and pillar-extraction commenced. South-west of and adjacent to Webb Mine a fairly large area of good coal suitable for opencasting has been proved, the nature and thickness of overburden render it unsuitable for underground mining.

The ambulance-room and new workshops, including substation, have been completed. A new and more suitable bin has been built, providing greater storage capacity and much more expeditious loading facilities than was possible with the temporary chute structure.

E Hill Opencast Mine: A regular high output was maintained from the mine. The thickness of overburden has increased to about the limit that can be economically dealt with by the present equipment. Consideration is being given to the types and sizes of machines that will be required to ensure planned development and economical recovery of the coal from large areas beyond the present workings where the overburden is still greater.

A recent survey of adjacent areas has proved substantial reserves of coal suitable for opencasting, fully justifying the expenditure required to purchase the right type of machines to ensure efficiency and economy in the operations.

The survey party under Mr. McCormick's direction have prospected about 5,000 acres, completing a detailed survey on Block 1 comprising 550 acres, proving 636,800 tons of excellent coal in this area. This work provides detailed structural and topographical contour maps which are an invaluable guide in planning the layout of opencast mines. A much greater area has yet to be surveyed.

The cost of maintenance of the locomotives and locomotive road has been extremely heavy. The locomotives have about reached the end of their useful life, frequent breakdowns occurring that cannot be provided against because of the age and condition of the plant.

Tenders have been called for the erection of an aerial haulage unit to replace the present haulage system.

Extensive alterations and repairs are being made to the main bins at Ngakawau.

Alterations and additions to the Ngakawau office have been completed, providing a suitable drawing-office and very necessary improvements to other parts.

I have, &c.,
T. McGhie, District Manager.

The District Manager, State Coal-mines, Bennydale, to the Under-Secretary, Mines Department, Wellington.

Sir,— 29th May, 1947.

I have the honour to submit my report on the working of the Mangapehi and Tatu Mines and the Waitewhena Opencast for the year ended 31st March, 1947.

Mangapehi Colliery

Output.—The gross output for the year was 53,940 tons 12 cwt., a decrease of 4,171 tons 2 cwt. when compared with the figures for the previous year. After allowing for waste (1,442 tons 12 cwt.) and the quantity used on works (949 tons), there remained for disposal a net output of 51,549 tons.

Taking into account the stocks at the beginning and end of the year, the following statement shows details of the coal disposed of during the year:—

	Tons	cwt.	qr.	Tons	cwt.	qr.
1st April, 1946—						
Stock in bins and yard	10	7	0			
Add net output for year ..	51,549	0	0			
				51,559	7	0
31st March, 1947—						
Less stock in bin and yard ..	..			139	17	0
Total disposed of ..	..			51,419	10	0

Disposals

	Tons	cwt.	qr.			
Local and mine sales	1,024	5	0			
Railed	49,781	5	0			
Sales to workmen and free issues ..	614	0	0			
				51,419	10	0

The gross output since the colliery was taken over by the State Coal-mines to date is 349,838 tons 2 cwt.

Days worked.—The colliery worked on 228 1/16 days out of a possible 242. In addition, the colliery worked on 13 back Saturdays and 5 statutory holidays, making the total days worked 246 1/16. The difference between the ordinary days worked and the possible number of working-days is accounted for as follows: 6 1/2 days, disputes; 4 1/16 days, stop-work meetings; 1/2 day, power failure; 2 1/8 days, mechanical breakdowns; 1/2 day, transport; 1/4 day, election.

Employees.—In connection with coal-winning, there were employed in and about the mine an average of 123 men and 2 boys, made up as follows—Underground: coal-hewers, 34; deputies, shiftmen, and truckers, 66. Surface: 23 men and 2 boys.

Daily Earnings.—The coal-hewers' average daily earnings were (gross) £2 18s. 4d., and after deducting stores, 2s. 4d., their net return was £2 16s., a decrease of 11d. per day when compared with the previous year.

Daily Output.—The average daily output was 219 tons 4 cwt. and the average per coal-hewer was 8 tons 2 cwt., as compared with 234 tons 7 cwt. and 8 tons 18 cwt. for the previous year.

Deficiencies.—No amounts were paid under the minimum-wage clause during the year.

Accidents.—During the year there were no accidents of a serious nature. The number of minor accidents necessitating absence from work for three days or more was 73.

Underground Workings.—Development has been confined to the No. 2 East, where a pair of headings has now reached a point 32 chains from the junction of the main dip. General conditions in this area are uniform, with coal of excellent quality throughout the section, and rise panels can now be developed.

For the proposed introduction of hydraulic stowing a new portal has been formed, which involved driving approximately 3 chains, of which distance the first chain was in stone.

Production for the year has been from pillaring in the No. 2 West, No. 2 East, and No. 1 East rise panels, the latter section coming into production when, in December, the West Section was permanently sealed after the extraction of the last pillars.

Repeated instances of spontaneous heating were experienced in both pillar sections, with live fires occurring at times, while general heating in the floor throughout increased the difficulties. Water-mains have been installed throughout to deal with heatings.

Floor heave, excessive in some areas, created additional deadwork, and this in the No. 1 East haulage roadway and return involved months of roof brushing and reconditioning. While the work was mainly on coal, excessive extras applied, with man-shift production much below that from solid places.

Pillaring results in Mangapehi Mine, due to the percentage of miners accustomed to this class of work being very low, are very disappointing, and, with the completion of the extraction of the panels now operating, changes in the development system will be made.

This, briefly, will be by retreating from the rise in each panel with pillaring immediately following the completion of the bords, with only roadway and air-course through the solid block of coal below the working-faces.

The altered system, designed to meet changed conditions encountered in the lower levels due to additional cover and extension of workings, should make a decided improvement and permit of concentration in smaller areas. The flushing system is being introduced and perfected to meet the conditions existing.

The output, which has declined, has been below expectations, absenteeism being a contributing factor. A shortage of men and a drift from the mines has followed the cessation of hostilities overseas, and applications for work from experienced men are rare.

The shortage of man-power, combined with additional maintenance in the mine, has prevented development and prospecting in the lower dip. Heavy creep recently experienced in this area, adjacent to faulting, may cause a change of plans to be made, and dip development off the lower East level in uniform country to be decided upon.

During the year no serious accident occurred, while each instance of underground fire occurring was successfully sealed.

Township.—The increase in housing accommodation in the township for the year was six modern five-roomed cottages erected on co-operative contract. Contracting firms and carpenters generally are hard to find in the country or for rural work.

A painting contract for twenty of the first houses erected has been let, but a start has not yet been made with this work.

A modern electric bakery has been erected in the township, this filling a long-felt want, while inquiries for a section to open a butchery have been made by two returned soldiers who recently purchased the Mangapehi butchery.

Roads in the newer section of the township have been metalled, and improvements in the standard of Ellis Road, with grading and alignment, to be followed by metalling to highway standard, is now under way. The latter is the responsibility of the Waitomo County.

Recreation-ground.—A croquet-lawn, $\frac{1}{3}$ acre in area, has been laid down and suitably fenced and should be in readiness for the coming season.

Football, basketball, and softball are now being played on the main grounds, and by a combined voluntary effort sponsored by the footballers a change-room pavilion is being erected.

The ground will require further top-dressing and heavy rolling, with drainage in parts to effect the desired improvement; and the sealing of the tennis-courts should be proceeded with prior to the opening of the season.

Tatu Colliery

Coal-winning.—The gross output for the year was 34,377 tons 5 cwt., an increase of 1,804 tons 9 cwt. when compared with the previous year. After allowing for waste (1,776 tons 17 cwt.) and the quantity of coal used on works (225 tons 9 cwt. 2 qr.), there remained for disposal a net output of 32,374 tons 18 cwt. 2 qr.

Taking into account the stocks at the beginning and end of the year, the following statement shows details of the coal disposed of during the year:—

	Tons	cwt.	qr.	Tons	cwt.	qr.
1st April, 1946—						
Stock in bin	90	0	0			
Add net output	32,374	18	2			
Add surplus stocks taken on charge	142	11	0			
				32,607	9	2
31st March, 1947—						
Less stock in bins				77	0	0
Total disposed of				32,530	9	2

Disposals

	Tons	cwt.	qr.	Tons	cwt.	qr.
Railed	30,427	19	0			
Mine sales	1,445	5	2			
Workmen	602	9	0			
Free coal	54	16	0			
				32,530	9	2

The gross output from the colliery since inception amounts to 174,588 tons 4 cwt.

Days worked.—The colliery worked on 226$\frac{1}{8}$ days out of a possible 242. In addition, the colliery worked on 5 statutory holidays, making the total days worked 231$\frac{1}{8}$. The difference between the ordinary working-days worked and the possible working-days is

accounted for as follows : 2½ days, union meetings ; 2 days, funerals of ex employees ; 5⅛ days, disputes ; ⅝ day, mine declared wet ; 1⅜ days, extra Christmas holidays ; ½ day, breakdown of bus ; ¼ day, election ; 3½ days, floods.

Employees.—In connection with coal-winning, the average number of men employed in and about the mine were 93 men 5 boys, made up as follows—Underground : hewers, 20 ; 20 ; deputies, shiftmen, and truckers, 38. On the surface : 35 men and 5 boys. Total, 98.

Coal-hewers' Daily Average Earnings.—The coal-hewers' daily earnings were (gross) £3 18s. 8d. After deduction of expenses their net return was £3 13s. 6d., a net increase of 10s. 9d. per day when compared with the previous year.

Daily Output.—The average daily output was 148 tons 14 cwt. 3 qr. and the average daily output per coal-hewer was 8 tons 17 cwt., compared with 153 tons 7 cwt. and 8 tons 14 cwt. respectively for the previous year.

Accidents.—During the year there were numerous minor accidents. A large proportion of these were bruises and cuts and several cases of strains.

Workings.—Development continued to the south-west by a pair of headings off the main heading which was abandoned about three years ago when, after driving for upwards of 4 chains in a diminishing seam finally less than 4 ft., it was decided to concentrate on another area.

The extension of this development was continued with encouraging results, with places later extending beyond and in front of the original heading face, where it was found the seam had thickened to upwards of 7 ft.

The general conditions also had shown a decided improvement, with fairly good roof and good-quality coal, and on driving back to intersect the main heading face it was found that thin coal only extended about a chain beyond the point at which development previously ceased.

This section has proved equal to the best so far met in the mine, and it is unfortunate that the area is limited to a block 10 chains in width between two parallel faults, but from the point now reached it should be possible to extend beyond the workings of the Old Egmont Co., of which favourable reports are on record.

The output from the number of miners engaged has been very satisfactory, although the operation of single-man places, even after the seam thickened, together with the use of pneumatic drills throughout, has assisted in the improved returns.

Pillaring, with satisfactory results and high extraction percentage, was carried out in the North-west Panel, but during the waning stages floor heave, excessive when wet conditions existed, created added maintenance of roadways, and during the recovery of the lower strip of the barrier pillar in retreating, similar difficulties existed.

The reconditioning of the lower section of the main heading where thin coal was passed through formerly is being undertaken to establish a straight haulage road direct to the main section being developed. The original drive over this section had been closed by floor heave and roof falls.

Maintenance of roadways and air-courses, mainly through excessive floor heave, has been a major problem, and this work has been carried on almost continuously.

The mine generally is a difficult one to operate, and although face conditions in some sections are ideal but with limited extent, the yielding floor and high percentage of wet time involved creates considerable maintenance costs, while the number of men engaged on this work, together with those on surface and ropeway handling, is very high when compared with those on actual production in the mine.

Prospecting with five bores (each of which struck the coal and furnished data relating to apparent faulting adjacent to Outcrop Creek, on the Heao Gorge escarpment) was carried out ; but, with improved results from underground development, the proposed change has been shelved meantime, as the cost of a new portal with surface arrangements would involve a large capital outlay.

The proposal can be reconsidered, if necessary, at a later stage, when the data obtained from the prospecting programme will be useful.

During the year further electrical underground extension has been carried out, and with electric winches now on order it is intended to replace compressed-air equipment wherever possible.

The main haulage has also been improved by installing a more powerful motor and control gear, and this haulage has been extended, and a further extension will follow when the lower section of the main heading is reconditioned.

The aerial ropeway has operated satisfactorily, and with the addition of fifty new bucket bodies its capacity increased, while a new 6 ft. rope-wheel complete with bearings has been installed to adjust a defect in the original plant.

The railway weighbridge, which had been irregular in action, was reconstructed in steel framing throughout and reinstalled in a new site in a substantial concrete pit, and it should give years of useful service.

No accident of a serious nature occurred during the year, nor was any major mining irregularity experienced.

A shortage of experienced shiftmen has been felt, and the absenteeism in an increasing degree was ever present.

Waitewhena Opencast

Coal-winning.—The net output for the year was 21,629 tons 11 cwt. 2 qr., a decrease of 1,568 tons 12 cwt. 2 qr. when compared with the previous year.

The following statement shows details of coal disposed of during the year:—

1st April, 1946—	Tons. cwt. qr.	Tons. cwt. qr.
Stock on hand	..	
Add net output for year ..	21,629 11 3	
		21,629 11 3
Less stock on hand, 31st March, 1947	..	..
Total disposed of ..	..	21,629 11 3

The net output from the colliery since its inception amounts to 63,712 tons 3 cwt. 1 qr.

Workings.—In the early part of the year a regular output was obtained from the No. 1 Area in the Lee Creek, while stripping operations with good results were undertaken in No. 2 Area, which is estimated to yield 11,700 tons.

During the late winter's extremely wet weather, creep of overburden continually interfered with these operations, resulting in irregular poor output, even when additional earth-work machines were introduced, and in September it was decided to cease production until the road to the No. 2 Area, where a reserve of stripped coal of 35,000 tons was available, could be completed.

This access, commenced early in July, on account of the atrocious weather and sloppy conditions causing numerous obstacles, was not workable until October, when production resumed from a strip of coal cleared along the escarpment from the graded section of the road.

Gradually increasing returns, from removal of the seam and extension of the road along the outcrop to No. 2 Area, were had, and production from this area commenced in November and has been regularly maintained, with increasing output.

With a peak of 220 tons, an output of approximately 160 tons daily has been produced, while reserves have been increased. They are now estimated at 43,000 tons.

With machines operating on top of the coal-seam, former difficulties with stripping of overburden will be considerably lessened, and the changed system of grab and navvy, combined with truck transport of spoil to a good dump on the steep escarpment, can be undertaken at all times, where formerly bulldozers and carryalls proved unworkable.

Bins and the necessary screening-plant are now under construction at the railway siding, and this, when completed, will be an improvement on the present bar-screen at the mine and enable graded coal of superior quality to be produced.

The above installation is well advanced and part of the team, as suitable tradesmen are scarce, has been transferred to the Waitewhena Valley, where an aerial flying-fox is under construction, together with a mine bin and a roadside bin for the ropeway.

This installation will convey the run-of-mine coal direct from the escarpment to the roadside bin, which is about 300 ft. below, the ropeway being about 1,200 ft. in length.

A suitable ropeway has been secured, and although modifications will be required, with the plant simplified in some details, this will not involve much delay.

As difficulty was experienced with the supply of suitable timber for aerial ropeway structures and bins, this is now being obtained on the site, where a good patch of birch has been secured.

Anchor tunnels for the ropes of the ropeway have been driven, and the necessary foundations prepared for the bins, at the upper and lower terminals, and for the tension structure.

A railway-wagon weighbridge has been installed at the siding, and this has assisted materially with speedy dispatch of consignment returns, the coal having previously been weighed at various stations.

Reserves are adequate. With a reliable access to the opencast face, regular output is assured during the following year, and with the screening-plant in operation (electric power should be available in about two months' time) a further improvement will be had.

I have, &c.,
GEORGE SMITH, District Manager.

The MANAGER, Wilton State Colliery, Ngaruawahia, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,— 9th April, 1947.

I have the honour to submit my annual report on the working of the above colliery for the year ended 31st March, 1947.

Coal-winning.—The gross output for the year was 79,937 tons 4 cwt., a decrease of 8,715 tons 10 cwt. when compared with the figures of the previous year. After allowing for waste, 3,923 tons 12 cwt., and coal used on works, 859 tons 8 cwt., there remained for disposal a net output of 75,154 tons 4 cwt.

Taking into account the stocks at the beginning and end of the year, the following statement shows details of the coal disposed of during the year:—

	Tons	cwt.	qr.
1st April, 1946—			
Stock in railway wagons	28	0	0
Add net output for year	75,154	4	0
	75,182	4	0
31st March, 1947—			
Less stock in railway wagons	14	0	0
Total disposed of	75,168	4	0

Disposals

	Tons	cwt.	qr.	
Railed	45,098	14	0	
Railway sales	28,985	7	0	
Local and mine sales				
Sales to workmen and free issues	1,084	3	0	
				75,168 4 0

The gross output for the colliery since its acquisition by the Government on 20th October, 1944, totals 202,224 tons 16 cwt.

Days worked.—The colliery worked 228 days out of a possible 242 days. In addition, the colliery worked 14 back Saturdays and 5 statutory holidays, making the total days worked 247. The difference between the ordinary days worked and the possible number of working-days is accounted for as follows: 1 day, funeral of ex-employee; 1 day, extra Christmas holiday; 3 days, bus dispute; ¼ day, election; ½ day, power failure: 4 days, Pukemiro dispute; 4 days, stop-work meetings; ¼ day, floods.

Employees.—In connection with coal-winning, the average number of persons employed in and about the mine was 176 men and 5 boys, made up as follows—Underground: coal-hewers, 64; shiftmen and truckers, 61. Surface: 51 men and 5 boys.

Coal-hewers' Average Daily Earnings.—The average daily earnings of the coal-hewers after deducting explosives were £2 10s. 11d., which shows an increase of 1s. 5d. when compared with the previous year.

Daily Output.—The average daily output from the mine was 323 tons 12 cwt. and the hewers' average daily output was 9 tons 19 cwt. 3 qr., compared with 346 tons 2 cwt. and 9 tons respectively for the previous year. The number of hewer shifts worked was 8,001¼.

Deficiencies.—The total amount paid under the minimum-wage clause was £185 13s. 1d.

Accidents.—The colliery was free from serious and fatal accidents during the past year, although 190 accidents were reported, mostly of a minor nature.

Underground Workings.—In the No. 3 Mine (east side) the output was obtained from pillar-extraction. This work is now completed. Pillar-extraction in No. 2 Mine and the B Panel in No. 3 Mine and development work in No. 3 Extended Mine, still continue. No. 2 East Heading Section is now in a distance of 16 chains from the main haulage road, whilst No. 3 East Headings are in about a similar distance. Stone intrusions occur fairly frequently in both of the above sections. The latter section has passed through several small faults, and at the present time we are crossing another 6 ft. downthrow fault. The coal-seam approaching this fault becomes interspersed with stone intrusions. On the other side of the fault, from the little we have seen, the coal is apparently clean and fairly hard. A coal-cutter has been installed in each of these sections, also an electrically driven boring-machine in No. 2 East Heading Section. Whenever the other borer comes to hand it will immediately be installed in No. 3 East Heading Section. The installation of the coal cutter and borer resulted in a much larger output being produced from these particular sections. No. 4 West Heading Section was advanced approximately 11 chains until it encountered a downthrow fault with a displacement of 12 ft. When the other coal-cutter arrives, present intentions are to have it installed in No. 2 Extended Mine. Because of the shape of the field it will necessitate driving the main headings as fast as possible, and since we are confined to working one shift producing coal, it is only by means of the coal cutter and borer we can accomplish this. A small dip heading is being driven from B Panel into A Panel so as to be ready for extraction whenever the former panel is completed, which will be in the near future. No. 4 East Section was developed up to the fault in several places. When all of the development has been completed in this section, extraction will take place as the coal on the other side of the fault can be more conveniently and economically worked from No. 3 East Heading Section through opening up a panel on the south side of same. A small amount of developing is still being carried on in No. 3 West Section in good coal notwithstanding that in the other sections—*i.e.*, Nos. 1 and 2 West Sections—the coal thinned and the seam split until we had only about 3 ft. of coal. I intend driving a pair of developing headings from No. 4 West to the north in the direction of a bore-hole which shows 7 ft. 2 in. on the plan and about which there is apparently some doubt. During the year considerable repairs were effected to the surface ropeway from No. 3 Mine. These were necessary, due to the havoc played by the elements last winter.

Stone-dusting.—Dusting was carried out at regular intervals during the year, in addition to the daily dusting of the working-places. During the year sixty-three samples of dust were taken and analysed.

Dangerous Occurrences.—Nothing of this nature occurred during the year.

Stoppings.—All the stoppings between the main intake and return airways were completed in the extended mine, and stoppings were erected in No. 4 West Headings and Nos. 2 and 3 East Headings.

Plant.—During the year the main No. 3 Extended Mine haulage engine was transferred inbye and endless haulages were installed in Nos. 2 and 3 East Sections, a pump and direct haulage in No. 4 West Section, and direct haulages in Nos. 2, 3, and 4 East Headings as close to the faces as possible, whilst a Korfmann coal-cutter was installed in each of Nos. 2 and 3 East Sections and one electric borer in No. 2 East Section. During the year 100 new mine skips were put into the mine.

Private Railway-line.—Maintenance work was carried out on this line during the year, whilst the New Zealand Railways bridge gang did necessary repairs to bridges. It was also necessary to bring in the New Zealand Railways maintenance gang at the week-ends to try and maintain this line in running-order. Painting of the bridges is just about completed. Maintenance cost of the line is exceedingly high.

Bus Service.—A passenger-bus service was inaugurated from Ngaruawahia to the mine in June, 1946.

Housing and Mine Buildings.—These were maintained in good order during the year. Several housing loans were granted to employees to build their own homes. A new house has been built and completed for the Surveyor, whilst a start has been made on a new residence for the Manager in Ngaruawahia. The new mine office was completed and occupied in October, 1946. The old office is now being used as an office for the Engineer and Manager and as a stores room.

Mechanization.—During the year a modified scheme of mechanization was put forward and approved. Modified because of the available coal. This scheme incorporated the use of loaders, coal-cutters, and electric boring-machines. Due to the inability to obtain supplies and materials quickly from overseas, it has only been possible to install two coal cutters, one each in Nos. 2 and 3 East Sections, also an electric borer in No. 2 East Section. Up to the present time, however, I expect to receive another three electric borers within the next five weeks. There is also another coal-cutter on order, but it must be months before we receive this. The loaders, according to advice, will not be available until early next year. The long periods which elapse between the time of ordering materials and obtaining delivery of same is the only reason why mechanization of this mine is being delayed.

Future Development and Boring.—During the latter part of the year arrangements were made to put down several boreholes on the west side of the No. 3 Extended Mine to determine the existence of further coal. Any such coal would have to be worked from the present Extended Mine. A commencement has been made with the first borehole. No. 2 Mine is nearing exhaustion, and with a reasonable daily output this mine would be finished in 1948. Negotiations were carried out between the owner and representatives of the Mines Department with a view to boring an area to the north of the present No. 2 Mine. Arrangements have now been made to have this work started. Also surveys of the proposed haulage rope road and the necessary earthworks have been completed, so that if the bores prove successful we are in a position to go right ahead immediately and have this mine, which will be known as No. 2 Extended, partially developed before No. 2 Mine is finished. A new road is being constructed to the No. 3 Extended Mine entrance. This, when completed, will be 92 chains long and should be a big advantage, since the present road terminates approximately 10 chains from the bathroom. In addition, the men have then to walk a distance of 35 chains to No. 3 Extended Mine entrance. With the completion of the new road the buses can take the

men to the bathroom and then to the mine entrance, and *vice versa*, which will make it much easier for them, and also save time which is now lost in travelling to and from their places. When No. 4 West Headings have crossed over the present fault they will have a distance of approximately 8 chains to go until they come to the outcrop. When this has occurred it is the intention to work from here a block of coal known to exist on what is called the Bank property. Before this can be done, preliminary work will be necessary to locate the outcrop at the most convenient point, also a small amount of earthwork will be necessary.

Reasons for Decreased Output.—The decrease in the output for the year is due to: (1) reduction in days worked; (2) shortage of efficient labour following lifting of Man-power Regulations; (3) slips and washouts due to heavy rain during winter.

I have, &c.,
JOHN PENMAN, Manager.

From the SUPERINTENDENT, Waikato Controlled Mines, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,— 15th April, 1947.

I have the honour to submit my report on the working of the Waikato opencast mines for the year ended 31st March, 1947.

KIMIHIA

No. 1 Section (Kimihia Lake).—Work has continued on this section during the year, except for a period of eight weeks during mid-winter when coal-winning was stopped because bad weather conditions had affected stripping operations. At the end of the year sufficient coal had been stripped to ensure that, at the present rate of production, coal-winning can continue without interruption during the approaching winter months. During the year 248,830 cubic yards of spoil were removed.

During March the coal output was stepped up to 400 tons a day. The output for the year totalled 42,761 tons 13 cwt. 3 qr., making a total production of 66,595 tons 13 cwt. 3 qr. from No. 1 Area since work began there. To date Kimihia Nos. 1, 2, and 4 have produced 123,031 tons 7 cwt. 3 qr.

Vibrating screens are now being built, and the installation of this plant will result in a better grade of screened coal being supplied to consumers.

The quality of the coal-seam *in situ* is excellent.

The method used in the handling of the unstable overburden was unusual in opencast mines. Material was loaded by the 120-B (5 cubic yard) drag-line into Athey wagons carrying about 10 cubic yards each hauled by D8 tractors and tipped outside the mine area.

KIMIHIA No. 5

An area adjacent to and south-west of the present mine has been investigated during the year. Thirty-two coal-prospecting bores were sunk, together with five additional bores on the line of the stop-bank to test the overburden structure. All boring was done with the Department's C. N. Sullivan No. 2 drill rigged on a barge and floated over the bore-sites to a predetermined grid pattern.

A seam 24 ft. to 28 ft. thick has been proved and a stop-bank has been commenced to enclose an area estimated to contain 450,000 tons.

Land has been acquired and plans prepared for improving accommodation facilities in connection with this work.

Some 8 chains of stop-banking have been constructed involving the rehandling of 27,800 cubic yards of harder fireclay previously removed from No. 1 Area and stock-piled for the use to which it has now been put.

Glen Afton Opencast

This opencast has operated at irregular intervals during the year, with a complete shutdown from July to November, when all men and plant were transferred to Kemp's Opencast, Glen Massey. Stripping has now been completed and 454,080 cubic yards of overburden have been removed.

During the year 15,803 tons 4 cwt. of coal were recovered, making a total extraction to date of 48,403 tons 4 cwt. 2 qr. There remain some 8,000 tons of coal to complete the extraction of the area.

Arrangements have been made for the sale of a quantity of "ball fireclay," which is considered suitable for pottery-manufacture.

Preparations are now in hand to restore the surface as far as possible and plant suitable trees on the area.

Kemp's Opencast (Glen Massey)

Production from this mine has been maintained steadily during the year, when 55,246 tons 9 cwt. of coal were produced. Since November, 1944, when coal-winning commenced, 100,217 tons 18 cwt. has been won.

For the twelve months ended 31st March, 1947, 515,740 cubic yards of overburden were handled, making a total of 1,383,720 cubic yards of spoil removed from the mine.

Six workmen's cottages were completed and occupied.

Workmen from the mine have also been engaged on the construction of the Wilton Mine access road from No. 3 to No. 3A Mines.

Remedial measures to prevent erosion of the batters and silting of streams and pasture lands downstream have been found necessary.

Preparations are being made for additional boring on adjacent areas to be carried out.

I have, &c.,

P. M. Outhwaite, Superintendent, Waikato Controlled Mines.

Colliery Revenue Accounts for the Year ended 31st March, 1947

——	Liverpool.		Strongman.		Dobson.		Wallsend.		Blackball.		Stockton.		Webb.		Burke's Creek(*a*).	
SALES ACCOUNTS	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Sales of coal, f.o.r., c. and f., and f.o.b.	148,910		183,636		101,478		78,925		79,642		64,302		92,475		17,863	
Subsidy*	42,884		40,423		30,193		19,469		26,304		17,903		24,202		6,788	
		191,794		224,059		131,671		98,394		105,946		82,205		116,677		24,651
Less—																
N.Z.R. haulage	11,360		11,229		4,942		3,957		6,091		5,844		8,366		428	
Wharfage	2,196		2,728		1,151		878		1,027		1,342		1,919		15	
Special rate	708		698		329		251		293		..		..		1	
Marine freight	37,491		51,049		25,880		22,255		21,424		16,161		23,023		297	
		51,755		65,704		32,302		27,341		28,835		23,347		33,308		741
Coal sales net f.o.r.	..	140,039	..	158,355	..	99,369	..	71,053	..	77,111	..	58,858	..	83,369	..	23,910
WORKING ACCOUNTS																
Stocks on hand, 1st April, 1946 ..	3,251		2,139		1,635		587		1,006		887		973		..	
Wages	149,399		105,980		91,252		65,737		77,418		44,335		59,472		19,414	
Materials used	20,550		21,037		17,271		11,462		20,020		8,811		15,328		4,167	
Royalty	..		..		2,807		1,928		..		1,101		1,575		..	
Rail and bus fares	940		3,992		773		228		85		1,197		1,831		77	
Electric power	3,620		3,440		5,407		5,275		3,441		..		..		699	
Repairs and maintenance	6,265		6,380		6,156		5,964		7,173		3,806		5,525		1,368	
Coal-miners' Relief Fund	206		203		122		98		123		83		120		29	
Rescue station levy	222		204		115		95		123		120		165		29	
Workers' compensation premium ..	8,488		6,338		5,550		4,006		4,771		2,779		3,524		1,308	
Cartage	..		..		..		..		..		..		7,250		..	
Hire of plant	..		..		..		..		..		1,419		..		..	
Road maintenance	..		..		..		..		..		342		1,136		..	
Coal purchased	29		65		39		..		..		99		..		..	
	192,970		149,778		131,127		95,380		114,160		64,979		96,899		27,091	
Less stocks on hand, 31st March, 1947	822		1,688		2,272		562		813		983		1,419		102	
Cost of coal sold		192,148		148,090		128,855		94,818		113,347		63,996		95,480		26,989
Gross profit	..		..	10,265	..		..		..		..		..		..	
Gross loss	..	52,109	..	..	..	29,486	..	23,765	..	36,236	..	5,138	..	12,111	..	3,079
PROFIT AND LOSS ACCOUNTS																
Rents	..		40		..		..		..		..		..		36	
Insurance	152		134		126		108		135		27		38		9	
General expenses	1,204		517		165		178		349		37		54		182	
Travelling-expenses	39		42		45		37		92		32		47		100	
Printing and stationery	133		134		77		48		59		62		92		35	
Audit fees	53		52		31		25		32		5		6		1	
Salaries	3,557		3,527		2,342		2,265		3,018		924		1,317		864	
Depreciation	7,007		9,314		3,612		7,366		4,902		2,081		3,028		3,087	
Postages and telegrams	291		284		166		153		176		139		200		91	
Superannuation Fund subsidy ..	24		24		14		11		14		10		14		3	
Rates and grants in lieu of rates ..	154		150		407		400		520		252		364		420	
	12,614		..		6,985		10,591		9,297		3,569		5,160		4,828	
Less rents, &c.	1,090		..		302		141		1,733		283		408		..	
		11,524		14,218		6,683		10,450		7,564		3,286		4,752		4,828
Net profit { transferred to General	..		..		..		..		..		..		..		..	
Net loss { Profit and Loss Account }	..	63,633	..	3,953	..	36,169	..	34,215	..	43,800	..	8,424	..	16,863	..	7,907

(*a*) From 3rd June, 1946. *(For asterisk footnote, see page 39.)*

Colliery Revenue Accounts for the Year ended 31st March, 1947—*continued*

	Mangapehi.		Tatu.		Mossbank.		Wilton.		Wairaki.	
SALES ACCOUNTS	£	£	£	£	£	£	£	£	£	£
Sales of coal, f.o.r., c. and f., and f.o.b.	49,651		35,704		27,042		105,203		73,270	
Subsidy*	20,164		14,931		6,539		31,990		16,805	
		69,815		50,635		33,581		137,193		90,075
Less N.Z.R. haulage		152		2		26		30,543		1,343
Coal sales net f.o.r.		69,663		50,633		33,555		106,650		88,732
WORKING ACCOUNTS										
Stocks on hand, 1st April, 1946	7		71							
Wages	57,322		50,005		23,703		73,087		55,034	
Materials used	5,458		10,633		2,629		11,728		8,105	
Royalty					658		1,398		1,808	
Haulage	7,291				880		1,099		3,268	
Rail and bus fares	731		2,165				3,716			
Electric power	1,583		2,431		589		971		762	
Repairs and maintenance	1,824		2,686		524		10,875		996	
Coal-miners' Relief Fund	111		68		52		158		139	
Rescue station levy	114				102		157		271	
Workers' compensation premium	3,344		2,904		1,360		4,570		3,029	
	77,785		70,963		30,497		107,759		73,412	
Less stocks on hand, 31st March, 1947	98		61				18			
Cost of coal sold		77,687		70,902		30,497		107,741		73,412
Gross profit						3,058				15,320
Gross loss		8,024		20,269				1,091		
PROFIT AND LOSS ACCOUNTS										
Rents										
Insurance	412		164		21		190		68	
General expenses	358		135		56		121		145	
Travelling-expenses	228		226		15		300		45	
Printing and stationery	91		84		47		139		129	
Audit fees	6		4		7		9		18	
Salaries	1,544		1,261		672		1,679		1,773	
Depreciation	7,086		9,253		1,440		6,685		2,413	
Postages and telegrams	124		160		111		208		298	
Superannuation Fund subsidy	13		8		6		19		17	
Rates and grants in lieu of rates	200		277		17		356		103	
Commission							3,116			
	10,062		11,572		2,392		12,822		5,009	
Less rent, &c.	4,728		2,023		6		377		301	
		5,334		9,549		2,386		12,445		4,708
Net profit (transferred to General Profit and Loss Account)						672				10,612
Net loss (transferred to General Profit and Loss Account)		13,358		29,818				13,536		

MacDonald Colliery Profit and Loss Account for the Year ended 31st March, 1947

Dr.	£	Cr.	£
Depreciation	772	Rents	180
Net profit, transferred to General Profit and Loss Account	3,648	Royalties	4,240
	£4,420		£4,420

——	Liverpool.	Strongman.	Dobson.	Wallsend.	Blackball.	Stockton.	Webb.	Mangapehi.	Tatu.	Mossbank.	Wilton.	Wairaki.	Burke's Creek.
	£	£	£	£	£	£	£	£	£	£	£	£	£
*Total subsidy (excluding special subsidies)	51,128	47,923	35,310	23,888	32,618	21,917	26,901	24,391	18,340	7,926	37,431	20,039	8,379
Less amount recovered in respect of Saturdays and holidays and credited to wages	8,244	7,500	5,117	4,419	6,314	4,014	2,699	4,227	3,409	1,387	5,441	3,234	1,591
Subsidy as per Sales Account	42,884	40,423	30,193	19,469	26,304	17,903	24,202	20,164	14,931	6,539	31,990	16,805	6,788

Opencast Mines Revenue Accounts for the Year ended 31st March, 1947

——	Glen Afton.		Kemps.		Kimihia No. 1.		Waitewhena.		Stockton.		Ohai.		Wangaloa.	
SALES ACCOUNTS	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Sales of coal, f.o.r., c. and f., and f.o.b.	17,967		57,472		49,964		27,419		224,298		56,151		28,635	
Subsidy*	3,664		12,775		9,942		5,008		32,539		10,585		7,418	
		21,631		70,247		59,906		32,427		256,837		66,736		36,053
Less—														
N.Z.R. haulage	..		..		66		4		20,302		44		..	
Wharfage	..		..		..		..		4,656		..		..	
Marine freight	..		..		..		..		55,893		..		..	
		..		..		66		4		80,851		44		..
Coal sales, net f.o.r.		21,631		70,247		59,840		32,423		175,986		66,692		36,053
WORKING ACCOUNTS														
Stocks on hand, 1st April, 1946 ..	..		..		..		..		2,305		..		..	
Stripping overburden	26,380		43,105	}	40,876	{	7,915	}	123,329		30,532	{	4,190	
Excavation and cartage ..	2,812		25,505				17,937						15,521	
Road access and maintenance ..	1,510		2,476		312		1,081		2,536		190		702	
Royalty	..		1,382		..		..		3,952		807		..	
Coal-miners' Relief Fund	33		115		89		45		291		92		67	
Rescue station levy	20		90		43		..		402		194		..	
Boring, &c.	..		632		98		..		..		..		184	
Bus fares	..		35		..		..		3,140		..		..	
Haulage	..		2,633		2,268		..		..		2,374		..	
Sundry coal-winning expenses ..	40		105		545		521		535		176		29	
Restoration of surface	918		..		..		..		..		..		..	
	31,713		76,078		44,231		27,499		136,490		34,365		20,693	
Less stocks on hand, 31st March, 1947	..		..		..		..		3,442		..		..	
Cost of coal sold		31,713		76,078		44,231		27,499		133,048		34,365		20,693
Gross profit	..	..	..	..	..	15,609	..	4,924	..	42,938	..	32,327	..	15,360
Gross loss	..	10,082	..	5,831	..	..	..	..	..	..	..	..	..	..
PROFIT AND LOSS ACCOUNTS														
Rents	56		..		117		27		..		..		..	
Insurance	..		..		..		..		93		3		..	
General expenses	11		14		10		5		136		96		109	
Printing and stationery	17		50		43		21		222		84		28	
Audit fees	2		6		5		2		15		6		3	
Salaries	57		336		182		208		3,198		1,155		196	
Depreciation	3,050		12,215		1,429		770		5,065		7,111		2,401	
Postages and telegrams ..	10		38		29		19		485		210		29	
Superannuation Fund subsidy ..	4		13		10		5		34		12		8	
Travelling-expenses	37		28		22		46		113		26		13	
Rates	..		..		..		..		1,366		..		..	
	3,244		12,700		1,847		1,103		10,727		8,703		2,787	
Less rent received, &c.	..		225		..		..		990		15		14	
		3,244		12,475		1,847		1,103		9,737		8,688		2,773
Net profit {Transferred to General}	..	..	..	..	..	13,762	..	3,821	..	33,201	..	23,639	..	12,587
Net loss { Profit and Loss Account}	..	13,326	..	18,306	..	..	..	..	..	..	..	..	..	..

——	Glen Afton.	Kemps.	Kimihia No. 1.	Waitewhena.	Stockton.	Ohai.	Wangaloa.
	£	£	£	£	£	£	£
* Total subsidy	4,294	14,243	9,942	5,113	32,539	10,585	7,856
Less amount recovered in respect of Saturdays and holidays and credited to working expenses	630	1,468	..	105	..	..	438
Subsidy as per Sales Accounts	3,664	12,775	9,942	5,008	32,539	10,585	7,418

DEPOT TRADING AND PROFIT AND LOSS ACCOUNTS FOR THE YEAR ENDED 31ST MARCH, 1947

—	Auckland.		Wellington.		Christchurch.	
TRADING ACCOUNTS		£		£		£
Sales of coal		531,407		482,930		169,744
Sales of coke, wood, &c.				16,155		3,445
		531,407		499,085		173,189
Stocks on hand, 1st April, 1946			2,212		2,587	
Purchases of coal	504,960		402,481		145,058	
Purchases of coke, wood, &c.			9,984		2,953	
Wharfage and freights	683		5,316		26	
Haulage to depot	15,759		56,930		12,818	
Wages: Discharging			58		427	
	521,402		476,981		163,869	
Less stocks on hand, 31st March, 1947			1,048		3,184	
Cost of coal sold		521,402		475,933		160,685
Gross profit		10,005		23,152		12,504
PROFIT AND LOSS ACCOUNTS						
Advertising	44		44		44	
Wages: Yard			1,811		1,868	
Salaries	892		2,978		2,319	
Rents	136		631		135	
Travelling-expenses	4		6		20	
Repairs and maintenance			865		1,053	
Postages and telegrams	266		154		216	
Printing and stationery	24		190		116	
Insurance			21		12	
Cartage			4,528		3,065	
Sacks			789		395	
General expenses	150		887		286	
Audit fees			122		31	
Superannuation Fund subsidy	5		11		17	
Reserve for bad debts	35					
Rates	55		30			
Depreciation			610		493	
		1,611		13,677		10,070
Net profit: To General Profit and Loss Account		8,394		9,475		2,434

WANGANUI DEPOT: PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 31ST MARCH, 1947

Dr.	£	*Cr.*	£
Insurance	2	Rents	19
Net profit: To General Profit and Loss Account	17		
	£19		£19

General Profit and Loss Account

Dr.	£	£	*Cr.*	£	£
Net loss, 1946–47—			Net profit, 1946–47—		
Liverpool Colliery	63,633		Mossbank Colliery	672	
Strongman Colliery	3,953		Wairaki Colliery	10,612	
Dobson Colliery	36,169		Kimihia Opencast No. 1	13,762	
Wallsend Colliery	34,215		Waitewhena Opencast	3,821	
Blackball Colliery	43,800		Stockton Opencast	33,201	
Stockton Colliery	8,424		Ohai Opencast	23,639	
Webb Colliery	16,863		Wangaloa Opencast	12,587	
Burke's Creek Colliery	7,907		Auckland Depot	8,394	
Mangapehi Colliery	13,358		Wellington Depot	9,475	
Tatu Colliery	29,818		Christchurch Depot	2,434	
Wilton Colliery	13,536		Wanganui Depot	17	
Glen Afton Opencast	13,326		McDonald Colliery	3,648	
Kemp's Opencast	18,306				122,262
		303,308	Net recoveries—		
Interest on loan capital	75,743		Seddonville Colliery	34	
Less remission under section 3, Finance Act, 1943 (3)	75,743		Royalties	4,257	
		..	Interest receivable	3,286	
					7,577
			Net revenue from hire of plant, buildings, &c.		6,089
			Special subsidy to cover working losses		167,380
		£303,308			£303,308

Profit and Loss Appropriation Account

	£		£
Loans Redemption Accounts	£44,976	Transfer from General Reserve	£44,976

Balance-sheet as at 31st March, 1947

Liabilities	£
Liability to Consolidated Fund under section 6, National Development Loans Act, 1941	1,933,123
Sundry creditors	327,083
Deposits on contracts	4,039
Debt Redemption Reserve to be applied for redemption of capital	44,976
Reserves—	
General Reserve	115,324
Accident Insurance Reserve	79,714
Bad Debts Reserve	1,683

Assets	£	£	£
Collieries—			
Machinery, plant, ropes, and rolling-stock	450,243		
Development and Property Accounts	488,514		
Buildings at mines	134,985		
Cottages at mines	188,762		
Plantations at mines	633		
	1,263,137		
Less provisionally written off	751		
		1,262,386	
Depots: Property Accounts		13,621	
Plant, equipment, &c., on hire	113,381		
Less provisionally written off	10		
		113,371	
Opencast mining: Works in progress		213,848	
Briquetting: Preliminary expenses		609	
Prospecting on State coal reserve		29,385	
			1,633,220
Shares			105
Stores on hand—			
Collieries		186,838	
Spares for mechanical equipment		7,486	
			194,324
Coal stocks (bins, wharf, and afloat)—			
Collieries		8,840	
Opencasts		3,442	
Coal purchased		2,261	
			14,543
Stocks and stores on hand at depots		6,990	
Less provisionally written off		2,518	
			4,472
Housing advances to workmen		65,836	
Interest accrued and due		817	
			66,653
Miscellaneous advances			14,859
Sundry debtors		486,345	
Less provisionally written off		24	
			486,321

	Cash in Receiver-General's Deposit Account ..	..	4,039
	Cash in Public Account	2,766	
	Imprests outstanding	39,664	
			42,430
	Cash in Loans Redemption Account ..	..	44,976
£2,505,942			£2,505,942

State Coal-mines Office, Wellington C. 1.
H. H. GIBSON, Accountant.

A. McLAGAN, Minister of Mines.

I hereby certify that the attached Revenue and Profit and Loss Accounts of Collieries and Depots and General Profit and Loss Account and Balance-sheet have been duly examined and compared with the relative books and documents submitted for audit, and correctly state the position as disclosed thereby.—J. P. RUTHERFORD, Controller and Auditor-General.

Statement of Property Accounts as at 31st March, 1947

——	Liverpool.	Strong-man.	Dobson.	Wallsend.	Blackball.	Stockton.
	£	£	£	£	£	£
Development and Property Accounts ..	34,951	119,203	27,990	23,442	5,491	107,589
Machinery, plant, ropes, and rolling-stock	54,316	58,314	42,789	52,663	33,599	71,577
Buildings at mine	3,733	33,003	11,683	11,164	5,511	25,228
Cottages at mine	17,075	..	2,081	1,720	3,348	6,445
Plantations at mine	19	..	..	..	..	..
	110,094	210,520	84,543	88,989	47,949	210,839

——	Webb.	Burke's Creek.	Garvey's Creek.	Manga-pehi.	Tatu.	Mac-Donald.
	£	£	£	£	£	£
Development and Property Accounts ..	1,237	557	2,960	10,626	46,853	36,613
Machinery, plant, ropes, and rolling-stock	8,786	1,112	250	30,344	35,312	..
Buildings at mine	3,695	451	553	21,008	7,439	..
Cottages at mine	219	1,022	..	98,049	38,298	..
Plantations at mine	..	..	..	..	..	614
	13,937	3,142	3,763	160,027	127,902	37,227

——	Mossbank.	Wairaki.	Wilton.	Morley.	Totals.
	£	£	£	£	£
Development and Property Accounts	4,998	9,423	34,729	21,852	488,514
Machinery, plant, ropes, and rolling-stock ..	6,400	16,135	38,646	..	450,243
Buildings at mine	1,024	3,775	6,718	..	134,985
Cottages at mine	1,179	11,574	7,752	..	188,762
Plantations at mine	..	..	..	..	633
	13,601	40,907	87,845	21,852	1,263,137

Opencast Mines

——	Glen Afton.	Kemp's.	Kimihia.	Waite-whena.	Stockton.	Ohai.	Wangaloa.	Total.
	£	£	£	£	£	£	£	£
Work in progress ..	*1,940	19,422	*92,824	*63,257	10,304	2,625	*23,476	213,848

* Includes balance of purchase-price to be written off against coal-winning.

Statement of Receipts and Payments for the Year ended 31st March, 1947

	£	£
Cash in Public Account, 1st April, 1946	6,993	
Imprests outstanding as at 1st April, 1946	38,843	
		45,836
Proceeds sale of coal, &c. (including subsidy)	2,447,618	
Recoveries, refunds, &c.	65,389	
Royalties	7,340	
		2,520,347
Capital raised		120,000
Dishonoured cheques re-credited		423
		£2,686,606

	£	£
Mine development		36,388
Plant		87,556
Buildings		10,992
Cottages		17,926
Wages		945,964
Stores		249,290
Electric power		28,927
Bus and rail fares		17,738
Repairs and maintenance		60,339
Royalty		20,811
Rescue station levy		4,821
Coal-miners' Relief Fund		2,323
Coal purchased		591
Road maintenance		1,301
Hire of plant		1,613
Commission		2,843
Marine freights		272,970
Wharfage		16,703
Haulage		136,159
Special rate		2,481
Opencast coal-mining development and working-expenses		346,195
Compensation		31,218
Boring and prospecting		9,104
Housing loans		11,234
Other loans		5,571
Auckland Depot		19,845
Wellington Depot		84,509
Christchurch Depot		28,916
Wanganui Depot		623
Coal purchased on account depots		72,117
Sinking fund		44,976
Refunds (sundry debtors)		94
Cheques dishonoured		426
Public Service Superannuation Fund subsidy		295
Audit fees		438
Fire insurance		2,257
General expenses		6,313
Rent		988
Postages		2,718
Printing and stationery		1,552
Rates		3,111
Travelling-expenses		1,963
Salaries		51,859
Advertising		118
Cash in Public Account, 31st March, 1947	2,766	
Imprests outstanding as at 31st March, 1947	39,664	
		42,430
		£2,686,606

TABLE SHOWING THE POSITION OF THE STATE COAL-MINES ACCOUNT FROM INCEPTION TO THE 31ST MARCH, 1947

Name of Works.	Total Capital Expenditure.	Total Amount of Depreciation written off.	Assets as per Balance-sheet, 31st March, 1947.	Net Profits.	Net Losses.	Liabilities as per Balance-sheet, 31st March, 1947.
UNDERGROUND MINES	£	£	£	£	£	£
Liverpool	441,752					
Less sales, transfers, &c. ..	23,295					
	418,457	308,449	110,008	..	72,890	..
Strongman	309,672					
Less sales, transfers, &c. ..	42,607					
	267,065	56,545	210,520	6,341	..	..
Dobson	111,823					
Less sales, transfers, &c. ..	11,092					
	100,731	16,188	84,543	..	58,471	..
Wallsend	115,688					
Less sales, transfers, &c. ..	2,933					
	112,755	23,949	88,806	..	52,037	..
Blackball	69,565					
Less sales, transfers, &c. ..	6,758					
	62,807	14,906	47,901	..	91,787	..
Mangapehi	193,333					
Less sales, transfers, &c. ..	6,133					
	187,200	27,232	159,968	..	12,082	..
Tatu	167,272					
Less sales, transfers, &c. ..	17,285					
	149,987	22,085	127,902	..	49,504	..
Stockton	235,271					
Less sales, transfers, &c. ..	7,350					
	227,921	17,427	210,494	..	6,779	..
Webb	17,991					
Less sales, transfers, &c. ..	1,709					
	16,282	2,345	13,937	..	16,119	..
Wilton	106,232					
Less sales, transfers, &c. ..	837					
	105,395	17,550	87,845	..	12,470	..
Mossbank	36,195					
Less sales, transfers, &c. ..	19,297					
	16,898	3,297	13,601	1,370	..	..

TABLE SHOWING THE POSITION OF THE STATE COAL-MINES ACCOUNT FROM INCEPTION TO THE 31ST MARCH, 1947—*continued*

Name of Works.	Total Capital Expenditure.	Total Amount of Depreciation written off.	Assets as per Balance-sheet, 31st March, 1947.	Net Profits.	Net Losses.	Liabilities as per Balance-sheet, 31st March, 1947.
	£	£	£	£	£	£
Wairaki	47,634					
Less sales, transfers, &c. ..	2,113					
	45,521	4,644	40,877	21,883	..	..
Morley	21,852					
Less sales, transfers, &c. ..	..					
	21,852	..	21,852	..	..	..
Burke's Creek	6,229					
Less sales, transfers, &c. ..	..					
	6,229	3,087	3,142	..	7,907	..
Garvey's Creek	3,763					
Less sales, transfers, &c. ..	..					
	3,763	..	3,763	..	..	..
McDonald	93,595					
Less sales, transfers, &c. ..	760					
	92,835	55,608*	37,227	..	1,205	..
OPENCAST MINES						
Glen Afton	14,830	12,890	1,940	..	19,963	..
Kemp's	39,882	20,460	19,422	..	43,465	..
Kimihia	99,017	6,193	92,824	46,692	..	..
Waitewhena	70,443	7,186	63,257	6,659	..	..
Stockton	16,085	5,781	10,304	79,070	..	..
Ohai	21,445	18,820	2,625	36,457	..	..
Wangaloa	27,573	4,097	23,476	11,099	..	..
Beehive	..	..	..	..	413	..
DEPOTS						
Wellington	26,053					
Less sales, transfers, &c. ..	1,283					
	24,770	17,789	6,981	65,441	..	..
Christchurch	22,449					
Less sales, transfers, &c. ..	1,259					
	21,190	15,129	6,061	31,015	..	..
Wanganui	4,372					
Less sales, transfers, &c. ..	413					
	3,959	3,380	579	..	2,140	..
Auckland	..	..	..	12,910	..	..

* Includes interest (£30,286) capitalized from date of purchase to date lease was granted, now written-off.

TABLE SHOWING THE POSITION OF THE STATE COAL-MINES ACCOUNT FROM INCEPTION TO THE 31ST MARCH, 1947—*continued*

Name of Works.	Total Capital Expenditure.	Total Amount of Depreciation written off.	Assets as per Balance-sheet, 31st March, 1947.	Net Profits.	Net Losses.	Liabilities as per Balance-sheet, 31st March, 1947.
MISCELLANEOUS	£	£	£	£	£	£
Briquetting: Preliminary expenses	609	..	609	..	..	..
Prospecting on State coal reserve	50,770					
Less transfers, sales, &c. ..	20,469					
	30,301	916	29,385	..	..	..
Plant, buildings on mines, &c.	143,763					
Less transfers, sales, &c. ..	13,024					
	130,739	17,368	113,371	9,946	..	..
Seddonville Colliery ..	38,243					
Less transfers, sales, &c. ..	549					
	37,694	37,694	..	..	36,607	..
Royalties from 1st April, 1928	..	..	..	85,069	..	..
Taxation	..	..	..	..	51,929	..
Interest on investments ..	..	..	..	7,596	..	..
COMPLETED WORKS						
Point Elizabeth Colliery ..	98,210					
Less sales and loss by fire	2,291					
	95,919	95 919	..	147,583	..	..
James Colliery	74,495					
Less sales, transfers, &c. ..	6,250					
	68,245	68,245	..	2,970	..	..
Dunedin Depot	2,023					
Less sales of plant ..	641					
	1,382	1,382	..	..	4,248	..
Briquette Works	16,135					
Less sales of plant ..	2,066					
	14,069	14,069	..	..	22,661	..
Charming Creek, prospecting	5,957	5,957	..	..	5,545	
Hulks Property	4,034					
Less sales	1,949					
	2,085	2,085	..	1,787	..	..
Office furniture	190					
Less sales	17					
	173	173	..	..	173	..

TABLE SHOWING THE POSITION OF THE STATE COAL-MINES ACCOUNT FROM INCEPTION TO THE 31ST MARCH, 1947—*continued*

Name of Works.	Total Capital Expenditure.	Total Amount of Depreciation written off.	Assets as per Balance-sheet, 31st March, 1947.	Net Profits.	Net Losses.	Liabilities as per Balance-sheet, 31st March, 1947.
	£	£	£	£	£	£
Discounts	..	..	..	13	..	..
Cash lost (highway robbery)	..	..	..	..	89	..
Transfer to Accident Insurance Reserve	..	..	..	..	2,960	..
Refund, Mines Department ..	..	..	..	..	5,000	..
Runanga water-supply ..	..	..	..	..	5,000	..
Stores sales	..	..	..	463	..	..
Special subsidy	..	..	..	167,380	..	..
Grand total	2,754,445	..	..	..	..	..
Less losses, sales, transfers	192,380	..	..	..	..	..
	2,562,065	928,845	1,633,220	..	..	..
Total profit and loss ..	..	..	..	741,744	581,444	..
Balance: profit over losses	..	..	..	..	160,300	..
				741,744	741,744	..
Capital expenditure brought forward	..	..	1,633,220	..	..	..
Shares	..	..	105	..	..	..
Stocks on hand, less provisionally written off ..	..	..	213,339	..	..	..
Sinking Fund investment ..	..	..	44,976	..	..	..
Sundry debtors	..	..	486,321	..	..	..
Cash in Public Account ..	..	..	42,430	..	..	..
Cash in Receiver-General's Deposit Account ..	..	..	4,039	..	..	..
Housing Advances to Workmen and accrued interest ..	..	..	66,653	..	..	..
Miscellaneous advances ..	..	..	14,859	..	..	..
Loan Account	..	..	..	..	..	1,933,123
Bad Debts Reserve ..	..	..	..	..	..	1,683
Sinking Fund	..	..	..	44,976	..	44,976
General Reserve	..	..	..	115,324	..	115,324
Deposits on contracts ..	..	..	..	..	..	4,039
Accident insurance reserve ..	..	..	..	..	..	79,714
Sundry creditors	..	..	..	..	..	327,083
			2,505,942	160,300	..	2,505,942

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