

1901.
NEW ZEALAND.

ALLENDALE COAL-MINE:

REPORTS OF INSPECTORS SINCE INCORPORATION OF COMPANY.

Return to an Order of the House of Representatives dated the 3rd October, 1901.

Ordered, "That there be laid before this House all reports from Inspectors of Mines relative to the Allendale Coal Company's mine, made either to the Minister or to the manager of the mine, since the company was incorporated and up to the present date (17th September, 1901)."—Mr. J. ALLEN.

EXTRACT FROM COAL-MINES REPORT, 1891.

Dunedin, 14th March, 1891.

Allendale, Mine, Palmerston.—(28th July): Mr. Campbell, manager, showed me through all the workings. The seam is from 4 ft. to 6 ft. thick and of good quality. I was informed that the mine had only been opened in April last. All the coal has to be carted two miles to the nearest railway-station—Bushy. The coal is hauled up an incline from the mine-workings. An up-cast shaft has been sunk, and an airway driven to it. The air was good, and the mine-workings properly laid out. There are, however, some faults already met with, which may disarrange the original plan of work intended to be carried out. I fear there will be many faults found in this mine before long.

J. Gow, Inspector of Mines.

EXTRACT FROM COAL-MINES REPORT, 1892.

Dunedin, 31st March, 1892.

Allendale Coal-mine.—(29th July, 1891): Inspected all the workings, and found the seam has many faults throughout the workings. The seam varies from 5 ft. to 2 ft. going south, but a dip-drive, a distance of 50 yards to the northward, is said to be in 7 ft. of good coal. This dip was filled with water at the time of my visit. It is intended to put up a winding-engine at the head of the dip, in order to extend the dip to a considerable distance, to prove the value of the seam toward the low-lying land in that locality. If the result be satisfactory, then it is intended to lay a branch railway to Bushy Station. Since these notes were written the railway contract has been let.

J. Gow, Inspector of Mines.

EXTRACT FROM COAL-MINES REPORT, 1893.

Dunedin, 2nd May, 1893.

Allendale Coal-mine.—(4/10/92): Most of the miners are working on the dip side of the incline in a good quality of coal, which is about 8 ft. thick in places. A stone drive is being put in to get to a seam known to exist below the present working, and believed to be a continuation of a 5 ft. seam worked in the old pit some years ago. I examined all the working-places and found good air throughout the mine. Since my previous visit the railway-line from Bushy Station to near the pit has been completed. The coal is now passed over large screens into the railway-wagons, ready for the market.

J. Gow, Inspector of Mines.

EXTRACT FROM COAL-MINES REPORT, 1894.

Dunedin, 4th April, 1894.

Allendale Mine.—(3/8/93): All the working-faces were visited, and the roof found to be very good. In some parts of the mine the roof is shale or conglomerate, and in others coal. The coal is not as free from small stone bands as could be wished, but it is supposed they will run out as the work advances towards the dip, where the manager expects to find a large field of clean coal. The air is good throughout the workings.

J. Gow, Inspector of Mines.

EXTRACT FROM COAL-MINES REPORT, 1895.

Dunedin, 30th March, 1895.

Allendale Mine, Shag Point.—(3/8/94): Accompanied by the manager, I first went through the lower-seam workings where the coal is at present 3 ft. 8 in. thick, and thickening to the dip eastward. We then went through the return drive to the 7 ft. seam, where I saw all the working-

places. We then passed into the upper seam, through a stone drive, at the end of which the coal is 3 ft. 6 in. thick. Going north a distance of about 3 chains, a 3 ft. 6 in. seam of coal comes in overhead, and gradually the shaley clay between the seams cuts out, and the two seams coming together make a good 7 ft. seam of clean coal. This has been followed for 10 chains, along which distance there are three jigs placed 40 yards apart. Returned through a stone drive to the middle seam, and then through the trap-door to the main haulage-road. The roof is generally very good, and the air is good throughout the mine.

J. Gow, Inspector of Mines.

EXTRACT FROM COAL-MINES REPORT, 1896.

Dunedin, 16th March, 1896.

Allendale Mine, Shag Point.—(5/7/95): Went down the dip drive into the workings, and then on to the air-shaft, where I measured the air-current and found 7,700 cubic feet per minute passing through the mine. Examined the old workings on the north and south sides of the air-shaft and found them in good condition. Preparations are being made to take out a portion of the old pillars and work back towards the air-shaft and main dip drive. I then went into No. 2 seam and travelled north-east to No. 1 seam, which is a fine body of clean coal, 9 ft. thick. I then passed through a stone drive a chain in length, which cuts into No. 2 seam, where it is 7 ft. thick, all clean coal. I followed this to the north-east a distance of 9 chains, where I found some of the men taking out pillars. The work was apparently being carefully done, and the roof was settling down very nicely. I again went into No. 1 seam, and travelled 13 chains south-west to where the bulk of the men were working in 9 ft. of clean coal. This work is to be continued in the same direction a further distance of 14 chains, which distance has been tested from an upper level. I also examined No. 3 seam (4 ft.), which I reached through a stone drive. This coal is 45 ft. below the lowest level of any previously worked. I found all the mine-workings in good order and very dry. The air is good.

J. Gow, Inspector of Mines.

Office of Inspector of Mines, Dunedin, 8th February, 1898.

The Allendale Coal Company (Limited), Shag Point.

GENTLEMEN,—

When visiting your mine yesterday I did not notice any man-holes in your main incline. Kindly see section 33, General Rule 9. I do not think that the spare width in the incline meets the requirements, and shall be glad to see the Act complied with.

Please see also section 33, General Rule 17, as to covering in your pit-bank. I have had a complaint about this, also as to the steam from the pump so filling the drive that men cannot see their way when travelling. The exhaust difficulty can easily be got over by a simple suction-condenser, such as that made by Johnston, of Invercargill, for Walton Park, which Mr. Kenyon will be pleased to show any one. The vacuum obtained would effect a saving in steam sufficient to repay its cost in a very short time.

A complaint has been made that the fireman does not leave any proof of his examination of the places prior to the men starting work, as required by Special Rule 23. This is necessary, and I hope to have the assurance that the regulations are being complied with.

Yours truly,
J. HAYES.

P.S.—Permit for necessary Sunday labour enclosed.—J. H.

EXTRACT FROM COAL-MINES REPORT, 1898.

Office of Inspector of Mines, Dunedin, 30th March, 1898.

Allendale Colliery, near Shag Point (Allendale Coal Company, Limited, owners).—(3/6/97): The workings in this colliery are from an incline tunnel dipping in the opposite direction to the stratification of the measures. The seam is broken up to some extent by small faults. Good ventilation is maintained, and the places generally are in good order. The present return airway is rather small and very rough in places, but as a new tunnel has recently been driven to win an area of coal to the dip of the present workings, and a heading is now being cut which will connect the workings of both tunnels in the course of a week or two, there is no need to incur expense in putting the return airway into better order, as it will answer all reasonable requirements for the length of time it is required. When the connection is made, all the coal will be jigged to the new drive and hauled there to the surface. The present main working-drive will then become the upcast and second outlet, for which purpose it is admirably adapted. The new drive is 960 ft. long, with a grade of 1 in 5, and is afterwards driven level for 385 ft. Size, 10 ft. by 6 ft. The seam where struck is dipping about 1 in 2½. It is intersected by small faults, and has a varying thickness up to 6 ft.

JOHN HAYES, Acting Inspector of Mines.

EXTRACT FROM COAL-MINES REPORT, 1899.

Office of Inspector of Mines, Dunedin, 16th March, 1899.

Allendale Colliery, Shag Point (W. Everest, secretary).—(8/2/98): At this colliery a considerable amount of new work has been in hand for some time, and the new incline tunnel referred to in my last report was connected with the dip-workings from the old tunnel shortly after my last visit. The hauling plant has been moved to the new tunnel-mouth, and sidings laid, screens erected, &c. This is now the working outlet of the mine, the old tunnel being used for the

purposes of ventilation and as a second outlet. Underground the opening-out has been vigorously pushed ahead. On the south side the coal retains a good average thickness and quality, but going north it is thinner and not so good, owing to the occurrence of bands of stone and numerous small faults. This latter condition causes areas of bad roof, necessitating the use of a good deal of timber, and naturally the places so affected are necessarily rough; but I have no reasonable cause for fault-finding as regards the safety or otherwise of these places. I travelled through the entire workings and out by the old tunnel. In connection with the new tunnel there are a few conditions of a somewhat temporary character which it would be desirable to have put on a better footing, and about which I wrote the company on the day following my visit. Mr. McIntosh, the managing director, afterwards informed me, in the course of conversation, that he was attending to my wishes as quickly as circumstances would permit.

(5/5/98): Mr. J. C. Campbell having accepted the position as manager of the Burnwell Colliery, Lovell's Flat, is succeeded by Mr. Alexander Gillanders.

(15/11/98): I again inspected the mine, and found it splendidly ventilated. The workings have been considerably extended since my last visit, and present much the same features as before. The coal varies from 3 ft. to 9 ft. thick.

J. HAYES, Inspector of Mines.

DEAR SIR,—

Office of Inspector of Mines, Dunedin, 29th September, 1899.

Re ventilation of mine: If you read Wardle's book, you will find authenticated instances of increased ventilation being obtained (where the upcast has a larger area than the downcast) by partially closing the outlet at the top of upcast. You might try the effect of a canvas stopping, which would close off, say, half the width of your dip at the top set of timbers, and let me know the result. If this shows an improvement, then you could augment it by carrying light exhaust-pipes up the dip, and boxing a continuation of the haulage-road for 20 ft. to 30 ft. above top of drive, and letting your exhaust-pipes terminate in this wooden tunnel or box. This, and a good trimming up of your intake air-road, should meet your needs.

Mr. Alex. Gillanders, Allendale Colliery, Shag Point.

Yours faithfully,
J. HAYES.

SIR,—

Office of Inspector of Mines, Dunedin, 29th September, 1899.

I would suggest (in the interests of general safety) that you fasten rubbing-boards, say, 8 ft. by 1 ft., on the legs on each side of the rails in your main dip, and compel all persons travelling on the incline to do so on the pipe side of middle legs. A notice to this effect should be posted.

Yours faithfully,
J. HAYES, Inspector of Mines.

Mr. A. Gillanders, Allendale Colliery, Shag Point.

EXTRACT FROM COAL-MINES REPORT, 1900.

Mines Department, Wellington, 11th April, 1900.

Allendale Colliery, Shag Point (A. Gillanders, manager).—(19/4/99): Continued work in the seam proves that the coal is still variable in thickness, the minimum, so far as yet seen, being 3 ft. 6 in. and the maximum thickness 8 ft. Taken as a whole, the roof is rather bad, and the coal-field disturbed by numerous small faults. In the new mine the solid workings are approaching the old mine-workings, where the coal is still standing in pillars. The ventilation is very fair. The attention of the manager was drawn to some minor matters in connection with the working of the mine verbally, and also by letter under date of the 22nd April, 1899. A fatal accident occurred at this mine on the 13th April, 1899, the particulars of which will appear under the head of "Accidents."

(26/9/99): There is now a considerable area of ground opened out, and the work of extracting the pillars near the rise of the field has commenced. A cross-measures tunnel, driven from the bottom level, has cut an underlying seam 4 ft. 6 in. thick, so far as proved. This seam is from 30 ft. to 40 ft. (vertical) below that hitherto worked, and as yet very little has been done in it. Ventilation very fair on the whole, although near the old workings the air was slightly charged with black-damp. This was perhaps all the more noticeable on this date in consequence of the ordinary work of the pit being suspended for the day owing to falling-off of demand, and advantage being taken of this to effect needed overhauls to the pumping-plant. The steam was necessarily cut off, and, as the ventilating-power is largely augmented by the heat from steam-pipes, the decreased ventilation for the time being is easily understood. Mr. Gillanders subsequently informed me that he had improved the ventilation generally throughout the mine.

J. HAYES, Inspecting Engineer.

EXTRACT FROM COAL-MINES REPORT, 1901.

Office of Inspector of Mines, Dunedin, 11th March, 1901.

Allendale Mine, Shag Point (A. Gillanders, manager).—(11/5/1900): The trucking-roads and airways in the section worked from the bottom of the main incline are under considerable pressure, a partial creep having set in. This district is intersected by numerous small faults carrying water, and the roofs and sides have to be supported, entailing large expenditure for maintenance and renewal of timber. The working-places, however, at present being opened are in an area of splendid coal. The roof is good and very little timber is required. The air is not what it should be in some of the far-in places. I drew the manager's attention to the state of the air at several of the working-faces, more especially at No. 2 north level face. The intake airway (old mine) is very circuitous and small in area, and the air become more or less stale before it reaches the working-

faces, being charged with the deleterious gases thrown off by the old workings which it passes through. This the owners propose to rectify immediately by putting through from the new workings at a point which will communicate with a straight drive 4 chains from the bottom of the old mine. Reports well kept and rules posted, but plan in arrears.

(21/11/1900): Owing to wet weather the mine-mouth showed signs of closing, and some 500 tons of cover have been removed. Mine entrance and cross-measures drive from No. 1 north level very wet and dirty. Pillars adjoining the old mine-workings are being well taken out. Air good throughout the mine; 7,950 cubic feet of air per minute at the intake. On the 8th May, James McRorie was taking down a stone from the roof, when it came away unexpectedly; left leg fractured.

E. R. GREEN, Inspector of Mines.

Office of Inspector of Mines, Dunedin, 29th March, 1901.

Re non-compliance with section 33 subsection (1), "Coal-mines Act, 1891," on the 21st instant, at the Allendale Coal Company's Mine, Shag Point—Mine-manager, Alex. Gillanders; general manager, Allan McIntosh; secretary, W. Everest—all of Shag Point:

I have to report that while visiting this mine as above, accompanying the Coal-mines Commission, I found that—

1. There was a deficiency in the ventilation at the pillar face workings, No. 2 north level, off No. 2 jig main seam. The air was not conducted to the faces, the stentons were not stopped off, and the air naturally took the nearest route to the return, leaving the working-faces unsupplied. The air where Hinks and son and Wilson and McLellan were working was polluted with black-damp from the waste; the temperature was high, and the men were working under very uncomfortable conditions.

2. There was also inadequate ventilation in the new workings which underly the main seam, and have only recently been opened up. Six men—McMillan, Smith, McLaren, Cook, and McKay—work in the section visited (north side). The air was smoky and hot at the face, being almost stagnant. There was so little air-current in the intake to this district (stone drive) that I could not obtain a record of movement on my anemometer.

The air at the main intake (old mine mouth) measured 6,750 cubic feet per minute, an average of 143 cubic feet per minute for each of the forty-five men and two horses underground. This would be an adequate quantity under ordinary circumstances if conducted to the working-faces; but in this mine the air intake traverses the old mine-workings for some 9 chains before the present workings are reached. Naturally, there is an exudation of black-damp from the old workings into the intake air.

I mentioned this to Mr. McIntosh in May last year, when he informed me that he was considering the question of sinking a shaft for ventilation and second outlet. This matter now requires immediate attention; a "creep" on the old mine is causing the intake bottom to heave badly, most of the timber is broken, and the airway throughout its entire length is so low and contracted in area that it cannot be called a travelling-way (we had to go through it bent double, or on hands and knees). A double shift of men should be put on at once to lift and stow bottom and renew timber where broken. The main engine incline has not been receiving proper attention; several sets of timber knocked out have not been renewed, and the fallen stone from the roof lies where it fell—on the travelling-way.

I have written Mr. McIntosh in reference to these matters, and have also required him to remedy the same forthwith.

E. R. GREEN, Inspector of Mines.

The Under-Secretary, Mines Department, Wellington.

Office of Inspector of Mines, Dunedin, 17th April, 1901.

I VISITED and examined the Allendale Colliery yesterday, the 16th. An adequate quantity of air was circulating throughout the working-places. The intake airway referred to in my report of the 29th as being low and contracted in area is being enlarged. A gang of five men are lifting and stowing bottom and renewing timber where required. The roof, however, in this part of the mine stands well, and it is the rising bottom, due to "creep," which causes the props to break.

Plans are being prepared to drive a pair of new levels in the solid from the foot of the old dip to the top of a heading in the No. 3 seam. A shaft is to be sunk at a point near the pump and the exhaust steam therefrom turned into it. The intake air will then travel to the working-places through the new levels in the coal, and the route through the old workings will be cut off.

E. R. GREEN, Inspector of Mines.

Under-Secretary, Mines Department, Wellington.

Re ALLENDALE COLLIERY.

REFERENCE to my reports for the years 1898–1900, as Inspector of Mines for the Southern District, will show that I have referred each year to the difficulties under which this mine is situated as regards bad roof, &c., and faults. I have never found the owners trying to deliberately avoid the provisions of "The Coal-mines Act, 1891," and have been asked by the present manager to inspect the mine for his satisfaction.

At my last inspection (prior to coming to Wellington) I found that the work of extracting the pillar coal from the rise end of the field had commenced. At that time the face of work was a considerable distance from the main intake airway, and the latter was not then in any way imperilled. The natural sequence of removing the pillar coal is to cause the adjacent ground to heave and swell. If the pillars left to support roadways are on the small side (and this is a great

failing in this colony) then it is far better to take them out altogether and form a road through the worked-out ground. For a time such a road would be rough; when settlement is completed and the road so made trimmed up, it will often stand better than a road cut in the solid. Many a thoroughly safe roadway looks rough, and I have known many such to stand practically unaltered for years.

In such work as I have referred to—viz., extracting pillar coal—changes take place rapidly. The pressure brought on locally may cause the floor to heave as much as 2 ft. or 3 ft. in a few hours. Of course, if this work is in close proximity to a main airway, the management should provide an alternative road for the time being, so as to be independent.

It would be quite an easy matter for the changes I have outlined to take place between one inspection and the next, even if inspections took place more frequently than is at present possible in the Southern district, owing to the very large amount which has to be done and area covered by one person.

J. HAYES, Inspecting Engineer.

3rd May, 1901.

Office of Inspector of Mines, Southern District, Dunedin, 10th May, 1901.

IN reply to memo. No. 695, dated 3rd May, referring to my reports of the 29th March and the 17th April on the Allendale Coal-mine at Shag Point, and requesting me to state, by direction of the Hon. Minister of Mines, why this mine was in such a state as reported without previous action having been taken by me, I beg to state that the condition of the mine, as described in my report of the 29th March, was very different to what it was on the occasion of my previous visit on the 21st November, 1900. On this date (21/11/1900) there was no indication of the "creep" setting in, the airway was standing in good order but low, the seam there being only about 5 ft. thick, and I also noted that there was a good circulation of air throughout the working-places. The mine, with the exception of certain roadways which were wet and dirty, was in good working-order; and, seeing that the management were busy renewing timber and heightening the main roadway from the foot of the engine-plane to the bottom of the main jig with a view to making it a horse-way, and thus cutting off a considerable length of hand-drawing, I anticipated that the conditions of working would be very much improved.

On the 21st March, when I next visited the mine, I found that owing to "creep" my anticipations of an improved condition of matters had not been realised. I notified the proprietors to put on a double shift of men to lift and stow bottom in airway, to renew timber where necessary, and also to provide an adequate amount of ventilation in the pillar-workings No. 2 north level, also in the new workings No. 3 seam (*vide* report, 29th March).

On the 16th April I again visited the mine, and found that my instructions had been carried out, with the result that there was a marked improvement in the condition of the mine (*vide* report, 17th April).

I indorse the attached statement, dated 3rd May, 1901, by Mr. Hayes, Inspecting Engineer, and I am of the opinion that the area affected by and under the influence of the "creep" will settle rapidly owing to the thinness of the seam. The roof and floor will soon meet, when the heaving action will cease.

I intend to keep this mine under close supervision until the area affected returns to a normal state.

E. R. GREEN, Inspector of Mines, Dunedin.

The Under-Secretary, Mines Department, Wellington.

Mr. Hayes's statement returned herewith.

Office of Inspector of Mines, Dunedin, 10th September, 1901.

Re Allendale Coal-mine, Shag Point.

I VISITED this mine on the 30th August last, and made an exhaustive inspection of all the working-places, airways, and travelling-ways.

Air was good throughout the mine, except Hollis's heading, where the air was fair. Having only 4 yards to go to put through, the air here would be improved in, say, two days. The intake airway, on which, owing to "creep," there was considerable pressure on roof and sides in March and April last, has settled quietly. The bottom has been lifted, and the intake is now a good travelling-way and second outlet, being from 5 ft. to 6 ft. in height throughout. The air at the intake measured 8,200 cubic feet per minute, giving at the rate of about 200 cubic feet per minute per man working in the mine.

Double doors have been erected at the mouth of the upcast drive, and a shaft put up 25 ft. to the surface. A chimney has been built on the shaft, and is 6 ft. by 5 ft. by 20 ft. high, and has a fire set in the bottom of the shaft. A steam jet has also been fitted in the upcast, and is used occasionally as required.

I consider that this mine has been restored to a good working state, and that there need be no present apprehension for the safety of the men employed therein, other than ordinary working risks.

E. R. GREEN, Inspector of Mines.

Under-Secretary, Mines Department, Wellington.

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