

MINE DISASTERS AND MISCELLANEOUS FATAL
ACCIDENTS, 1923

Aguilar, Colo., June 25, 1923.

Mr. James Dalrymple,
State Inspector of Coal Mines,
State Office Building,
Denver, Colo.
Dear Sir:

The following is my report concerning the explosion at the Southwestern mine, which occurred on the 5th of May, 1923, resulting in the death of ten men. I was in the Reliance mine at the time and as soon as informed, left for the Southwestern mine, arriving at the mine office about 6:30 p. m. The U. S. Bureau of Mines car No. 2 had arrived earlier in the day. Three helmet crews, composed of men from the Victor-American Fuel Co., Colorado Fuel & Iron Co., and the U. S. Bureau of Mines Rescue Car, Deputy Inspector W. M. Laurie, The Victor-American Fuel Co., and Colorado Fuel & Iron Co., safety inspectors, the Mutual Insurance Company's Deputy Inspector, Superintendents, Mine Foremen, and other practical men from the surrounding mines were giving their services. On arriving at the mine entrance, I found that the fan house had been repaired and fan running fifteen minutes after the explosion. Two bodies had been recovered from the manway. After ascertaining the whereabouts of the remaining bodies, I entered the mine. The crews advanced as far as the 3rd North parting and with the aid of the helmet crew, four more bodies were recovered in this section. The work of rebuilding temporary stoppings was continued and all the bodies were recovered by 9:00 a. m. May 6th, 1923.

The mine is situated about two miles northwest from the town of Aguilar, Las Animas county, Colorado, on the Colorado & Southern Railway. It is operated by the Rocky Mountain Fuel Co., of Denver, Colo. Mr. George T. Peart is Assistant General Manager, Mr. William Morgan, Division Superintendent, and Mr. Morgan Williams is Superintendent and Mine Foreman. Mr. William Thomas, fire boss.

The seams being operated are the upper and lower Robinsons. The explosion occurred in the lower seam, known as the North and South Slopes. The coal is bituminous, running from three to five feet in thickness. The coal is mined by hand. The ground is faulty. The mine is very dry, water very scarce and only available through purchase. The water for domestic use, outside hoist, and sprinkling of mine is pumped from Brodhead mine, a distance of one mile over the hills. Electric hoists were used for haulage purposes on inside slope and dip workings. Ventilation was produced by fan, electrically driven, producing about 40,000 cu. ft. of air per minute.

Ordinarily there were between thirty and forty men employed in the mine, but on May 5th, 1923, the mine was idle. A few men were working, some cleaning haulage roads and others making coal for the next working day. As customary the fire boss had fired the shots and examined the mine prior to other employes going to work, and reported the mine in safe condition to the mine foreman, who visited the places where the men were working that morning, between nine and eleven a. m. On the morning of the explosion, fire boss record books showed mine clear of explosive gas from April 16th to May 4th, inclusive. The record book for May 5th had not been signed at this date, but was signed later showing mine clear of gas.

From testimony given at the inquest it was stated that there were only three men at the mine who knew how to start the fan. The superintendent, mine electrician, and the mine blacksmith. According to the daily records of The Trinidad Power and Transmission Company, the power went off at 12:41 p. m., returning two minutes later, but owing to the volt release being thrown out, the fan could not start until the release was thrown in. The superintendent being at dinner, about one-fourth of one mile distant, the electrician being in Denver, and the blacksmith being employed at a point where he could not tell anything about the power, there was no one present who knew how to start the fan. The superintendent upon returning to the mine about 1:20 p. m., being notified that the fan was not running, threw in the release. About three minutes later the explosion occurred.

The Southwestern mine was examined by me on February 7th, 1923. I found numerous faults were being encountered, gas being given off at some of them, and while the mine had always been an open light mine, I believed that on account of the faults, some of which were giving off explosive gas, the over-head cover getting greater, and the mine being dry, that Permissible Electric Head Safety Lamps should take the place of the open lights and so recommended. Mr. George Peart, upon receipt of recommendations advised by letter that electric head lamps would be installed. This recommendation had not been complied with at the time of the explosion. Mr. George T. Peart, Assistant General Manager for the company, produced letters at the inquest stating that electric head lamps had been ordered from the Mine Safety Appliances Co., of Pittsburgh, Pa., and that no assurance could be given as to the date of delivery by the manufacturers. In the meantime the coal company had some electric lamps brought from some of their other properties, but many of the batteries were found defective, and only a few of them in working condition, which were given to the men working in the most dangerous places in the mine. The following is a copy of a letter which the Chief Inspector of Coal Mines received from the Mine Safety Appliances Co., concerning the placing of order for electric head lamps and efforts made to get same.

MINE SAFETY APPLIANCES CO.

908-912 Chamber of Commerce Building

Pittsburgh, Pa., June 6, 1923.

Mr. James Dalrymple,
State Inspector of Coal Mines,
Denver, Colorado.

Dear Sir:

We are in receipt of letters written by you to Mr. T. R. Jones, our representative in Denver, Colorado, relative to orders from the Rocky Mountain Fuel Company for Edison electric safety mine lamps, and at his request we have gone over our records during the interval in question and find Rocky Mountain Fuel Company order No. 28539, dated March 2d, 1923, for 20 M-361-4 Edison electric safety mine lamp headpieces complete with cover. This material was not in stock when this order was received, and it has been almost impossible to get headpieces, even up to the present time, and our records show approximately 1,500 of this particular item on back orders with the Edison Storage Battery factory, from whom all of these parts must come.

On April 3d we received a telegram from T. R. Jones relative to this order, as follows:

"Rocky Mountain Fuel order of March 2nd; when can you ship; need goods badly."

To which we replied by wire in the following manner:

"Rocky Mountain Fuel order for headpieces not in stock. Factory promises stock shipment to us middle of month. Will ship soon as available."

Again on April 9th we received a telegram from T. R. Jones regarding this order, from which we quote:

"Add twenty more headpieces to the order of Rocky Mountain Fuel Co. They are in desperate need of these goods and are very bitter over what they call very poor service. Do the very best you can."

This order was amended to include these additional headpieces, but were not in a position to ship, as these parts had not arrived from the Edison factory. On May 8th we received a further request by wire, to make shipments of these parts, to which we replied:

"Factory promises stock shipment to us this week. Will ship headpieces Rocky Mountain Fuel approximately ten days."

Shipment was then made immediately upon receipt of these parts on May 16th.

Yours very truly,

MINE SAFETY APPLIANCES CO.

(Signed) GEO. H. HEIKE,

President.

GHD:KSS

CC—Mr. T. R. Jones.

INVESTIGATION

On the morning of the 7th, the ventilation had been restored sufficient to permit an examination of the mine. Accompanied by Mr. Joseph Watson, Joseph Cochrane, Insurance Inspectors, James Dalrymple, Jr., Victor-American Fuel Co. Inspector, Harry Jones and Morgan Williams, Chief Engineer and Mine Superintendent respectively for the Rocky Mountain Fuel Co., and James Dalrymple, Chief State Inspector of Coal Mines, I entered and examined the whole mine to determine the initial point and cause of the explosion. The initial point was located opposite last cross-cut between main and back slopes about 70 feet in by a gas feeder on the back slope where Rozman was working and his body found. Evidences of extreme heat were plentiful with little or no signs of violence. The forces radiated in all directions from this point, increasing in violence as they traveled. Chief Inspector Dalrymple, in the presence of Insurance Inspector Joseph Cochrane, found a carbide lamp at the point where Rozman was working. Upon further search, a can of carbide and matches were found close by and from the position of the carbide lamp it would appear that it was in use at the time of the explosion.

Mr. Rozman had started to work in the slope section two days before the explosion. He was furnished with an Electric Lamp at that time and his carbide lamp was taken from him and locked in a cupboard outside of mine. He was also advised by Supt. Williams that open lights, matches, etc., were not allowed in that part of the mine.

CAUSE OF EXPLOSION

The explosion was caused: first, by the power being cut off the mines by a flash of lightning. Second, by no one being present that knew how to start the fan immediately upon return of power, thereby allowing fan to remain idle for thirty to forty minutes, sufficient to allow considerable explosive gas to accumulate, that upon starting of fan, gas was carried to and came in contact with an open light, exploding, thereby raising the coal dust in suspension causing a general explosion of gas and dust that traversed the whole mine.

REMARKS

Superintendent Morgan Williams, in starting the fan with the men in the mine violated Section 50 of the Coal Mining Laws. Evidently he did it on the impulse of the moment and without thinking.

Respectfully submitted,

HUGO H. MACHIN,

Deputy State Inspector of Coal Mines,