



# Reports

REPORT ON EXPLOSION IN #8 MINE OPERATED BY THE ROCK ISLAND  
COAL MINING COMPANY, HARTSHORNE,  
OKLAHOMA.

-----

On the morning of October 21st, 1909, about 8:10 a.m. , an explosion took place in Mine No.8, operated by the Rock Island Coal Mining Company, near Hartshorne, Oklahoma, resulting in the loss of ten lives and the injury of one boy.

This is a shaft mine which cut through the coal at the depth of 254 feet. What is known as 7th of main entry runs level from the bottom of the shaft, and at a distance of 250 feet a slope is driven to the dip, known as 26 slope, which has been driven down 2,100 feet. Seven entries have been turned to the right and left. The inclination of the vein is about 5 1-2 degrees to the North.

The explosion was confined entirely to the 11th east entry, which did not show any extraordinary violence, except on the stoppages in the break-through between the upper and lower entries.

The ventilation of the mine was supplied by a 7 1-2 Stevens high speed fan, which is making 200 revolutions per minute at the present time and at this speed gives 60,000 cubic feet of air per minute. Said fan is located on top of the upcast shaft and exhausts the air, which shaft is located 275 feet from the

hoisting shaft. The hoisting shaft is used as the downcast, the air travelling in the 7th or main entry to 26 slope, where it is split, one current passing down to the bottom of the slope, where it again splits into two separate currents, one current traversing the entries on the east and one current traversing the entries on the west. There was 23,000 feet being forced down the slope. The current traversing the west side was slightly in excess to that traveling on the east side.

From measurements taken on the 25th, there was 6,3000 cubic feet traveling through the break-through, next to the 11th east entry face. The entry had been driven in to a distance of 1,200 feet, 21 rooms being turned. Eight of these rooms are being worked, that is from 14 to 21, both inclusive.

The coal is all hauled out to the slope through the lower entry as far in as a cross road, which connects the upper entry or air-course with the lower entry. The coal is taken from the rooms and hauled down through this cross road or to the lower entry as aforesaid.

The men in the entry and air-course worked with safety lamps, which shows that they both made considerable gas. The gasman made report in a book, which is kept at the engine room for the purpose of the gasman making report showing results of his morning's inspection. All places were marked clear in this entry except room 18, which report in book showed as being dead lined. Investigation shows that the gasman had re-entered the mine and had gone into 11th east entry and put some curtain

into 18 room, and evidently had left the working face a short time previous to the time the explosion occurred, as he was found outside of a trip of three loaded cars, which driver had gathered that morning and was hauling out the entry. The two first cars had been thrown off the track by a piece of slate, and it is supposed that Hughes, the gasman, had been assisting the driver to put cars on when the explosion occurred, which point will be shown by blue print accompanying this report.

From the position that the bodies of the dead men were found, it is beyond a doubt that they were all at work, when the explosion occurred, and some of them must have been at work for some time. In room 14 we found a loaded car at the face and one man lying between the car and face of room on his shovel, showing that he had been in the act of loading the car and had not travelled from the point where he was when the explosion took place.

Also, in 18 room, a car had been placed and the bed of the car loaded to about level full. It was clearly in evidence that this car had been partly loaded that morning, and I believe from the surrounding conditions that he had been in the act of loading this car when the explosion occurred, and that he had passed the car, in an effort to escape, as his body was found in 17 room, marked No.8.

My investigation leads me to believe that considerable care had been exercised in this entry to conduct the air current close to the working faces. This conclusion is supported by

the information gathered from men who were in a position to know.

I visited the mine on the 21st and 22nd, but owing to the disarranged condition of the ventilating current, it was impossible to make such an investigation as was necessary. Therefore, we concluded to discontinue further investigation until Monday morning, the 25th, when the ventilation was partially restored, accompanied by the Chief Mine Inspector and one of his deputies, (for the State) two gasmen, Mr. Sholtz--General Manager, the Pit Boss, Local Superintendent and a committee of miners. We proceeded to make the final investigation, proceeding to the 11th east entry to the face, we took a measurement of the air in the break-through next the entry face leading from the lower to upper entries and found 6,300 cubic feet. It was the unanimous opinion of the two gasmen and others, who were familiar with the conditions, that there was less air traveling when we took the measurement than what was previous to the explosion. This opinion I am bound to concur in, as the stoppings that had been replaced were not permanently finished. Thence we traveled into the upper entry, traversing the various rooms that had been opened, until we reached room 14, the last room that is being worked. There was sufficient coal dust deposited on the props to lead me to arrive at a conclusion as to the point where the explosion originated. All the evidence that I could find leads me to believe that the explosion originated in rooms 17 or 18. The force exerted by the explosion extended

inwards and outwards and down towards the entry from these two rooms. Also, from the position of the coked coal dust on the props, show that the flame traveled in the three directions mentioned.

There was no great violence shown until we reached the entry running along below the rooms. The force exerted between the entries was probably the greatest shown at any point. All the stoppings in break-throughs connecting the two entries were blown down from the upper entry towards the lower entry from 14 room into the inside break-through. All stoppings outside of 14 room were blown in the opposite direction, or from the lower to upper entry.

After traversing the rooms affected by the explosion and coming down to the neck of room 14, I found a powder jack, which had been exploded and to all appearances had been buried in the gob. The fragments of this powder jack shows that it had been subjected to heat and that powder had been exploded in same, the force being exerted from inside of jack. This, no doubt, intensified the flame and force, and would cause it to travel further than it would have done.

The keeping of this powder in the mine was a violation of the rules, as the rules laid down for their guidance is that all powder must be taken from the working faces by the miner, and deposited in a box at a station designated by the company officials for this purpose, after which the company takes it in

charge, conveying the same out of mine and to powder house.

The gasman held a certificate granted by the examining board of the State of Oklahoma, and was considered by all to be a careful and competent gasman.

All the men were killed that were in the entry, therefore, there is no possibility of knowing how the accident was brought about, but it is beyond a question that some persons erred, either the gasman or one of the miners, and I am inclined to believe that the gasman was the man at fault, inasmuch as he should not have allowed the men to go beyond the lower end of the cross road leading from the lower entry to upper entry, (outside of 14 room) until such time as he knew for a certainty that all danger had been removed by the curtain he had placed in 18 room, which room he had dead lined that morning. All the bodies were burned to a greater or lesser extent, which shows that the flame from the explosion traveled out beyond the point where Hughes, the gasman, was found. This entry was extremely wet for the entire distance, and I believe that only for the wet condition of the entry, that the explosion might have travelled over a considerable portion of the mine. Which, if it had, would have resulted in the death or injury of others, who were in the mine at the time. The trapper boy who was near the outer end of the entry was not burned. This shows to me that the flame did not reach the point where the door stood, about 150 feet from the slope.

I also enclose a blue print which shows the workings of this mine, in connection with 26 slope, and the relative position of hoisting and air shaft. It also gives the name and points where the bodies were found.

The mule with the loaded cars was on the entry where No.3 body was found, William Franknon, driver, being caught between first and second car. Johnson, the trapper boy, was but slightly injured, and not burned. Hughes, the gasman, and William Frankson, driver, were both alive when found, but both died a few hours after being taken out without revealing anything as to how the explosion was brought about. The bodies were all recovered by 3:00 o'clock, except one, which was not recovered until about 12:00 o'clock that night.

In conclusion, a further evidence that some one erred is the fact that some of the dead bodies were found at points which would indicate that they had been at their working faces and that they had travelled but a short distance after the explosion did occur. It is to be regretted that the most careful investigation furnishes no absolute proof of how, or by whom, the gas was ignited. Any person who could throw light on the subject is dead, and theorize as we may, it would seem that proof of the cause of the explosion must remain shrouded in mystery.

Respectfully submitted,

WILLIAM CAMERON,

U.S. Supervisor of Mines.

**Maps**

**Not**

**Scanned**