

REPORT
OF
THE
1903
MINE EXPOSITION
AT
HANNA

On June 30th. at 10:30 A.M. with a report like a small cannon, Number 1 exploded and flames came out Man-way and slope. Was in the Machine Shop ran toward Mine, noticed fan still running, and both intakes, Slope and Man-way, closed. Slowed fan, which was not injured in any way, but roof off shaft. Started to shaft at nine entry plane. On the way over met Mat Lynn and Victor Herskinane, Finns, working in seven entry, found shaft OK, and started down. When we reached the bottom met a hot blast of air with some smoke, which delayed us a few minutes. As soon as the air changed followed it down the plane, accompanied by Gus Ramey, Wm. McDonald, Harry Smith, Murray Ryburn, Chas. Eskola, Dick Wilson, Frank Collins, Ed McAtoc and others. When we reached nine entry, found Plane runner Jas. Kilday near Drum, on the parting the drivers lying in the empty cars and one light still burning. Sent men into nine entry and went on to eleven. Found eleven driver, Warburton, on plane above entry and some diggers on the entry just inside the Plane. Sent men into eleven entry to get men out, and started to Slope. Made it through the Tunnel, but smoke was coming down twelve and thirteen rooms so thick could not pass them. Thinking air course might be blocked, sent word up to open slope. While waiting for smoke to clear, went back to eleven entry. All the men of seven, nine and eleven entries, accounted for but John Boney. Found him on loaded track, face buried in slack and dead. Boney and Warburton had been talking after their lights had been blown out. Warburton wanted Boney to go up Plane, but Boney said there was a wreck on slope and started toward the Slope. He must have met the smoke at Rock Tunnel, turned and in trying to reach Plane in the dark, got lost and was overcome where found. Both Mules dropped where they were standing. The second attempt made the Man-way, the smoke and after damp came up so thickly could not cross to Slope, came on top and went down the Slope. The fan shaft had been covered with brattice in the mean time, Found all the stoppings between the air course and Slope blown out, closed them with brattice to four back entry. This stopping was partly blown and the black damp coming out so thick we could not pass it. While putting up the brattice, was overcome by black damp and carried out. On regaining consciousness found a Special from Rawlins had arrived, and the men were still going down the Slope. As soon as strong enough, went down the Slope and by 11 PM. had reached fifteen entry where I was relieved by Morgan Griffiths and Alex Briggs. All stoppings but one on air course, blown out to fifteen entry. About 3 PM. word was brought that four men, William Christian, Robert Carter, Frank Massarro and Andy Hill, had come from seventeen entry through the old dip entries. A party led by Dick Wilson and Frank Collins and made up mostly of outsiders, went into seventeen entry, they found a cave near the inside end of Rock Tunnel, and counted 17 bodies, all were dead. Rescue party came near being lost in the attempt, came out through the plane accompanied by Mike Quealy, who had done efficient work from the time of the explosion. We gathered the nine entry stock and took them to the shaft on our way out.

The next morning, July 1st. We found the night shift had made no progress. Making permanent our temporary stoppings. In the evening of July 1st. We were relieved at seventeen stable entry. In the morning of July 2nd. found night shifts had again made our temporary work permanent, and we were further up the slope than we were the night of the day of the explosion. Jas. Needham had been through to Man-way on seventeen stable entry, while we were on lower side of cave on slope at sixteen entry. A fire which was started in seventeen stable, had gained such headway that the Man-way was full of smoke to thirteen entry, and return to surface. As it was now three days since the explosion, and no possibility of any men being alive, it was decided to close the slope and return below seven entry, clean the caves at five entry and between seven and eight entries, put in rock stoppings and make things safe as we went. On July 1st. recovered body of John A. Saari, rollerman near seven entry on slope, same day found body of John B. Jones, eleven entry team driver, above eleven entry on Slope. We closed Man-way at five entry, slope and air course above eight entry and plane at bottom of shaft. Cleaned caves at five entry and below seven entry, and built stoppings until track was clear to stoppings on slope. Opened up slope and air course and reached seventeen hauling road. Here we found smoke thick and attempted to put stoppings on Man-way and across hauling road. After hours of work in smoke, were compelled to give up and close slope and air course at thirteen entry. Our next attempt we put stoppings nearly completed, but had to retreat again. Our third attempt was successful, we got the hauling road and Man-way closed.

We then made our way to sixteen entry and seventeen stable entry. Succeeded in shutting up the stable entry and the back entry at pump room. July 16th. or fifteen days after we had first been to sixteen entry, got there the second time. Recovered body of Felix McKenna, pumper. July 16th. and the electric and compound pumps under. With the exception of falls at five and eight entries, found slope in good shape. Timbers had been knocked out at both places where slope had caved. On July 17th. went into sixteen entry. Outside manway on the parting, found loads and empties piled against the roof and wedged so, that it took two days to clear the wreck. Found Rudolph Sella, driver in Number one, room, and his mare, in the wreckage on the parting. Found the entry badly caved. And from July 17th. to 30th. we made to inside parting at forty room, recovering all the bodies in the entry outside forty room. Smoke having been seen, entry was closed and remained closed until August 21st. Opened entry again on that day and recovered all bodies except that of John Cox, sixteen entry gas watch. The inside mule had not been killed by the explosion, for it was lying on timber and evidently died from after damp. The men had all run from their places inside and fallen on the entry. The inside driver who was found near twentysix room, had evidently seen the fire coming and jumped off his trip. He nor his mule were badly burned. No evidence of fire inside fault, as we found the props burned on the upper side in Number one room, and the stoppings in rooms outside the block blown in, and those inside blown out. Believe explosion traveled inside from second block of rooms, and out and up room six and down one. The wreckage on the parting showed that the force that made it come from the inside. The props lying along the entry inside, indicated, being blown down from a force from the outside. Every car in the parting at sixteen was damaged, and the entry badly caved in three places. Inside the fault there was no evidence of an explosion. The tool boxes had not been turned over, no timber knocked down and all stoppings in rooms and on entry standing. Inside drivers trip caught under a fall and cars on track. Looked as if the first effects of the explosion had knocked out timbers. If he had gotten the full force of explosion before fall, his trip should have been piled, and he blown in. The only other man on the entry was terribly mutilated, one arm being blown off. On August 24th. closed entry at thirty six room account fire in thirty nine and forty rooms. On July 21st. reached eighteen entry and went down slope to twenty, finding body of Mike Sperro, rope runner and slope trip. Six cars of slope trip on the rope, nine about thirty feet below them, and out of the fifteen cars, nine were on the rails and none injured so but what they brought their loads to the top. ~~SAME DAY~~ July 21st. got into eighteen entry. Found the three drivers, J.B. Matson, D.B. Jones and Martin Mickelson on parting and cars and mule blown down the man-way. Showing force came from above. Matson on upper side between manway and slope, Jones and Mickelson against lower rib inside manway, and all stripped of their clothes. July 22nd. found body of D. Massaro twenty one room. July 24th. George Hooper twenty three room. Rooms nineteen to twenty four inclusive caved, and bodies covered. Fred Wilkins recovered September 5th. A. Luomo recovered September 30th. Eric Luomo recovered October 2nd. J.H. Swanson recovered October 18th. Sam Niskelson recovered November 7th. All covered with ten to fifteen feet of coal and rock. Eighteen entry had log stoppings in the months of all rooms from twenty five to forty three. That the explosion came into this entry was shown by the first log stopping it took being blown into the room. The rooms being blocks, it was forced to come down and blew the inside block room stopping onto entry. This made eighteen entry full of debris. While waiting for men to clean falls and timber entry, went down to twenty entry. Empty cars were blown across loaded track, showing force from above. Driver inside. On July 23rd. recovered body of James While, Jr. driver in entry outside thirteen room. Had gotten the full force of the explosion. Bones all broken and one arm blown off. His trip had been forced back along the entry behind him. Bodies of all men in rooms thirteen to eighteen inclusive recovered. Went to twenty two entry but could not get in as back entry was blocked by water. July 24th. recovered bodies of all twenty entry men working inside forty four room. They had traveled from face along back entry to cross cut opposite twenty eight room and were strung along to cross cut opposite twenty five room. By July 27th. had recovered all bodies in entry except those under caves in twenty five and twenty six rooms. Mat Tukola recovered October 8th. S Tukola October 28th. John Clarkson November 28th. L.J. Klassen November 30th. Robert Clarkson November 30th. Nic Theis December 4th. All rooms from twenty five to face being caved more or less, our progress was slow in this entry. We reached the face and found that a second explosion occurred there. Three empty cars were piled, the inside car being on top. The car at face of back entry with chain still hooked into draw bar, was blown off track and spread.

Every foot of lead brattice down and lagging poles broken. Powder keg exploded, and some had not. Tool box into splinters, still every man in this part of the entry had traveled two thousand feet away from it. While the empties near the face had been piled up, and the cars along the entry further out had been wrecked, some cars standing in forty four room were on blocks and ropes undisturbed. By August 3rd. had stoppings in between man way and air course to fifteen entry, and opened man way at five entry. Followed air down to eleven entry. Between five and seven entries, found the body of Theo Schill who had started to the top from eleven entry a few minutes before the explosion. Eleven overcast was blown through. Put brattice across the parting and followed air to seventeen hauling road. On August 5th. opened up the stable stoppings and found place full of smoke. Forced smoke back, and at 3 PM. had reached two room in stable. Account heat and smoke, night shift put stopping outside Number two room. Put stopping in sump inside cross cut. August 7th. opened up seventeen hauling road. Recovered body of Mat Jarvela, seventeen driver on parting. Only some coal off rib down, until we reached rock tunnel. At this point entry so badly caved could not get over. By 6 AM. a hole large enough to crawl through had been made over it, and night shift boss, J.E. Pettit, had been over cave. Reported seeing bodies on and under a cave inside the large cave. By 10 AM. had a hole large enough to get through with brattice cloth. Accompanied by Wm. Rae and George Pryde, crossed caves and made to parting on dip entries. Counted twenty seven bodies along the entry on parting and in back entry. Made a short return for air, and bodies were carried out through fifteen dip entry to fifteen top. Recovered all the bodies in seventeen entry except that of Axel Matson, dip driver, recovered December 13th. at cross cut inside two room, and John Norkonen trackman, recovered December 16th. on fifteen dip near overcast. All the bodies had been carried out past Norkonen, and he had been pased by day after day since we opened up seventeen hauling road the second time. The smell of the mule on parting was so strong that we imagined the smell on dip from the mule. Some Finns who were timbering and had never been on the entry, began to look around when they smelled it and found him under some rib coal. Commenced to clean cave on seventeen hauling road, but stopped account finding fire in stable. On August 10th. turned current on cable and found it OK. August 13th. started electric pump. Put two gangs on steam and discharge lines in air course. These lines were both broken in many places. By August 31st. had lines from fan shaft to twenty entry and lower steam pump running. We had been pumping twenty one out of twenty four hours to handle the water with a capacity of two hundred gallons per minute, or pumping two hundred fifty two thousand gallons per day. From June 30th. to August 14th. mine had accumulated eleven million, three hundred forty thousand gallons of water and had raised to twenty top entry on slope. On August 18th. reached the face of eighteen entry and recovered all bodies at the face, fifteen in all. Brought them out through the back entry. Falls on top entry so high we could not carry bodies over them. These men had run down from their rooms and dropped on the entry. From August 18th. to October 26th. when we reached twenty two entry, cleaned up caves and timbered entries, manway, air course and slope. Built over casts and under casts. Over cast at five, under cast at seven, undercast at nine, overcast at eleven, undercast at fifteen, overcast at seventeen hauling road and undercast at seventeen entry. All on main return blown out. Undercasts on eleven, thirteen, fifteen, seventeen, sixteen, eighteen and twenty entries on manway blown out. Bodies under caves near face of rooms which had caved from face to entry, a distance of over three hundred feet in twenty six room, twenty entry, were sought for day and night. Three shifts working most of the time. Manway caved from five to seventeen entry. At seven, nine and thirteen entries up to rock. At nine as high as thirty feet. Every foot of the manway from top to twenty four entry had to be cleaned, and most of it timbered. On September 25th. broke through stopping on nine plane and followed air to slope through eleven entry. Found nine, eleven entries and tunnel in good shape. On October 20th. reached twenty two entry. Found body of Pete Hawley, boss driver, on upper side of parting, inside manway. He was between an empty car and the rib. Got the full force of the explosion. His back was broken and his leg over his head. Thought two men there, as we could see a head and foot, and the foot we thought that of another. Four loaded cars standing just inside manway were uninjured, except the outside car. This car had gotten the full force on the door end, while the other three had not had the top coal disturbed. Seven empties inside manway had been blown back and off track, and the outside car was torn to pieces. On October 23rd. had recovered all bodies in this entry, except those of Archie McDonald and Robert Munley. McDonald recovered October 31st. Munley recovered November 2nd. Both were under caves in thirteen and fourteen rooms. All stoppings in this entry but one, blown out and pillar blown through on entry at point where entrymen had shattered pillar while driving entry. Six of the twelve rooms caved and two caves on entry. Driver inside, and loads that were on entry and empties on

switches all mixed up, and many cars broken. Two loads that driver had were not damaged. Position of him and his horse indicated that they had died from after damp, and were not killed outright. No body showed signs of violence. The body found on a car had no bones broken and must have been floating and lodged as water went down.

From October 24th. to November 18th. was cleaning up and timbering entries, roadway, slope and air course. On November 18th. opened up the stable entry and reached face. Was very hot but no smoke. Found fire had been in Number two room and along the entry. Succeeded in getting to face of two and three rooms. Four and five rooms caved so tight could not get over. Cleaned caves in stable to three room before smoke appeared. Fire was up this room and caved too close to get over. When we started to pull cave down onto entry, ribs and roof began to fall. By the time we got a few props up at three room, four room was full of smoke. We tried to reach fire by pushing pipe over cave, but could not. Closed the two crosscuts inside two room and entry outside two room. Found seventeen hauling road had caved again and so close, could not crawl over it. Cleaned cave over top so we could get over. When we got opposite three and four rooms, rocks were wet with sweat, and strong smell of smoke. While waiting for the water to get down so we could get into twenty six and twenty eight entries, cleaned and timbered slope parting, cleaned air course and entries and built stoppings on fifteen and thirteen entries and rooms in twenty entry where fire had shown up. On December 1st. reached twenty six entry on slope, and started small electric pump. Pump was not injured in anyway. Master Mechanic and his men had waded out and taken Motor off frame and sent it to the top. It was dried out in thirty six hours and pump started as soon as water was off the frame. We found a body on a cave opposite twenty six back, which was sent to top and identified as Joe Julio by some Italians. As Julio was driving at the face of slope, left orders to hold body until further advised. On December 2nd. got into twenty eight entry where diggers worked by wading through three feet of water. Recovered the bodies of the four men working there, and concluded Massey and Battle had finished measuring and gone up the slope.

On December 4th. reached the eighth crosscut from twenty one prospect entry and recovered bodies of A.E. Newsome, Ben Miller, Wm. Hall, Jas. Patten and Joe Julio, on slope. These men had broken through the air course stopping and put a brattice across the slope. Found their buckets still had their lunches in them, and from their positions, it was evident they had lived but a short time. They had not made themselves comfortable. Newsome was sitting with his back against the rib and his chin on his shoulder. Miller with his head in Newsomes lap. Hall on his knees next Miller and Patten below Hall, Julio across track lying on his face. Robt. Evans had run down the air course, for we found the oil can and bucket in the air course. Had then tried to get back to the others but dropped at air course, side of crosscut. Mule had been unharnessed and walked down to parting on slope plane before falling. First car on trip of four loads on rope, spread, one side on ground. Believing Massey and Battle had engineered the brattice, expected to find them in next crosscut above. Failing to find them or any signs of them, went to twenty six entry. On December 3rd. found them in twenty six back entry near face. They had seen the fire coming and had dropped on their faces. Hair was singed, but clothes bore no trace of fire. Battles book in his hip pocket with end sticking out above pocket, but under jumper, showed no signs of fire. A trip of six cars in twenty six back entry were all broken. Cars on switch at slope in twenty six back and twenty eight entry broken. By December 12th. had a hole over cave on seventeen hauling road which gave air enough to let us into seventeen entry through fifteen dip, and allowed us to put props along the dip. On December 13th. recovered the body of Axel Matson, who had run into entry and dropped inside second room. On December 16th. recovered body of Jno. Norkonen, trackman. Had run through the door and dropped next rib. This made the last of the bodies in the mine, except that of Jno. Cox.

-:LIST OF MEN KILLED IN MINE, JUNE 30TH. 1903:-

Check No.	Name.	Date Found.	Where Found. Entry	Room.
252:	Theodore Schill-----	✓ 8 : 3:	Betn. 5 & 7 on manway	
11:	Gus Westerlund-----	✓ 7 : 17:	16	1
26:	Sam Hudspeth-----	✓ 7 : 18:	16	Betn. 14 & 15
28:	Henry Leskela-----	✓ 7 : 30:	16	29
34:	Jac Mikkila-----	✓ 7 : 18:	16	11
40:	John Rysberg-----	✓ 8 : 21:	16	In cross-cut
67:	A. Heiskanen-----	✓ 8 : 22:	16	
69:	C.W. Heiskanen-----	✓ 8 : 22:	16	
77:	Dan Luoma-----	✓ 7 : 30:	16	29
82:	Chas Sommeril-----	✓ 8 : 21:	16	
139:	John Takia-----	✓ 7 : 30:	16	29
142:	John Re-buck-----	✓ 8 : 22:	16	
152:	John Ruuhola-----	✓ 7 : 18:	16	11
164:	John Hokka-----	✓ 8 : 21:	16	
176:	Mat Wissila-----	✓ 8 : 31:	16	
180:	Siman Ojala-----	✓ 7 : 19:	16	17
184:	Henry Talkanen-----	✓ 8 : 22:	16	
187:	Herman Talkanen-----	✓ 8 : 22:	16	
217:	Gabe Maki-----	✓ 7 : 18:	16	7
233:	John Huhta-----	✓ 8 : 21:	16	In cross-cut
255:	Lauri A Saari-----	✓ 7 : 30:	16	29
268:	Y. Hankino-----	✓ 7 : 18:	16	Betn. 6 & 7
1:	Henry Ojua-----	✓ 8 : 8:	17 Dip	
2:	Eric Longi-----	✓ 8 : 8:	17 Dip	
5:	Charles Mertilla-----	✓ 8 : 8:	17 Dip	
9:	John Asblund-----	✓ 8 : 8:	17 Dip	
23:	Herman Renko-----	✓ 8 : 8:	17 Dip	
58:	Alex Kleme-----	✓ 8 : 8:	17 Dip	
59:	Abe Nieme-----	✓ 8 : 8:	17 Dip	
63:	John Tomper-----	✓ 8 : 9:	17 Dip	
72:	August Longi-----	✓ 8 : 8:	17 Dip	
78:	John H Hill-----	✓ 8 : 8:	17 Dip	
86:	Isaac S Maki-----	✓ 8 : 8:	17 Dip	
89:	Alfred Hapgood-----	✓ 8 : 8:	17 Dip	
92:	August Maki-----	✓ 8 : 8:	17 Dip	
100:	S. Poutto-----	✓ 8 : 8:	17 Dip	
125:	Mat Hako-----	✓ 8 : 8:	17 Dip	
137:	Sac Kakko-----	✓ 8 : 8:	17 Dip	
149:	M.M. Luoma-----	✓ 8 : 8:	17 Dip	
151:	Henry Glaat-----	✓ 8 : 8:	17 Dip	
177:	August K Matson-----	✓ 8 : 8:	17 Dip	
181:	William Sakrison-----	✓ 8 : 8:	17 Dip	
190:	Nels Waktala-----	✓ 8 : 8:	17 Dip	
195:	Sak Jacobson-----	✓ 8 : 8:	17 Dip	
205:	Jim Delmonico-----	✓ 8 : 8:	17 Dip	
215:	Joseph Sheffield-----	✓ 8 : 8:	17 Dip	
237:	Henry Konkamper-----	✓ 8 : 8:	17 Dip	
256:	Alf Maki-----	✓ 8 : 8:	17 Dip	
3:	D. Massaro-----	✓ 7 : 22:	18	21
8:	Samuel Mickelson-----	✓ 11 : 7:	18	20
18:	Andrew Luoma-----	✓ 9 : 30:	18	19
41:	Elmer Matson-----	✓ 8 : 18:	18	
44:	Charles Pelto-----	✓ 8 : 18:	18	
56:	E. Petracco-----	✓ 8 : 18:	18	
66:	Andrew Matson-----	✓ 8 : 18:	18	
70:	Thos Weathers-----	✓ 8 : 18:	18	
80:	Mark Miller-----	✓ 8 : 18:	18	
81:	Fred Wilkins-----	✓ 9 : 5:	18	23
99:	John Passi-----	✓ 8 : 18:	18	
113:	George Hooper-----	✓ 7 : 24:	18	23
135:	Alu Heitola-----	✓ 8 : 18:	18	
175:	Andrew I Koski-----	✓ 8 : 18:	18	
179:	John Mertilla-----	✓ 8 : 18:	18	
186:	Eric Luoma-----	✓ 10 : 8:	18	19
188:	J.H. Swanson-----	✓ 10 : 18:	18	20
203:	Alf Holm-----	✓ 8 : 18:	18	
224:	William Williams-----	✓ 8 : 18:	18	
239:	Samuel Aysto-----	✓ 8 : 18:	18	
246:	William Rassia-----	✓ 8 : 18:	18	
266:	A. Di Zalla-----	✓ 8 : 18:	18	

Check No.	N a m e.	Date : Found: M:D	Where Found Entry	Room.
24:	Mat A Longo-----	7:24:	20 Back	
30:	John Lundberg-----	7:24:	20 Back	
35:	Carl Ruski-----	7:24:	20 Back	
46:	John Lassila-----	7:24:	20 Back	
49:	Robert Clarkson-----	11:30:	20	25
55:	John Honka-----	7:24:	20 Back	
83:	Thomas Manty-----	7:23:	20	14
91:	John Blumstrom-----	7:24:	20 Back	
95:	John Pelto-----	7:24:	20 Back	
107:	Robert Tinsley-----	7:23:	20	16
120:	Henry Wilmunen-----	7:24:	20 Back	
124:	Andrew Tikka-----	7:24:	20 Back	
132:	Samuel Kaeris-----	7:24:	20 Back	
134:	Andrew Longi-----	10:23:	22	
146:	Nic Laamanen-----	7:24:	20	17
147:	Alex Nikkola-----	7:27:	20	Near 32
148:	Sakri Wilmunen-----	7:24:	20 Back	
156:	Henry Lindi-----	7:23:	20	14
160:	Files Nickelson-----	7:24:	20	17
167:	Otto Mullanda-----	7:24:	20 Back	
174:	Mat Lundberg, Sr.,-----	7:24:	20 Back	
183:	S.J.Klassen-----	11:30:	20	26
192:	John Clarkson-----	11:28:	20	25
194:	G.Dandry-----	10:22:	22	13
218:	James Watson-----	7:23:	20	13
230:	Mat Lundberg, Jr.,-----	7:24:	20 Back	
231:	Andrew Williams-----	7:24:	20	
236:	Mat Tukola-----	10: 8:	20	Crosscut 26 to 27
238:	Nic Sorvista-----	7:24:	20 Back	
240:	S. Tukola-----	10:28:	20	26
247:	John Malberg-----	7:23:	20	18
249:	Mat Malberg-----	7:23:	20	18
253:	Uriah Davis-----	7:23:	20	13
256:	H. Rankinen-----	7:24:	20 Back	
259:	Nick Thies-----	12: 4:	20	26
264:	Clay Tinsley-----	7:23:	20	16
271:	Jac Wasti-----	7:24:	20 Back	
272:	Oscar Rukkola-----	7:27:	20	Near 32
279:	Alf Nieme-----	7:24:	20 Back	
280:	Mike Nikkola-----	7:27:	20	Near 32
281:	Gus Linden-----	7:27:	20	Near 32
16:	William Austin-----	10:23:	22	29
37:	Mike Arthurs-----	10:22:	22	15
94:	Philip Marzon-----	10:23:	22	17
109:	Henry Sanders-----	10:23:	22	13
117:	A. McDonald-----	10:30:	22	13
130:	Mat Longi-----	10:23:	22	Crosscut at face
131:	James Thomas-----	10:23:	22	Crosscut at face back
144:	Robert Nunley-----	11: 3:	22	14
166:	Charles Nieme-----	10:23:	22	30 on entry
170:	Jesse McDonald-----	10:22:	22	13
189:	W.O.Williams-----	10:23:	22	28
198:	Richard Bain-----	10:23:	22	Back at face
203:	W L Smith-----	10:22:	22	16
211:	Nic Massaro-----	10:21:	22	16
219:	Desha Austin-----	10:23:	22	28
285:	P. Di Cesare-----	10:21:	22	Crosscut 17 & 18
6:	John Raite-----	12: 3:	28	Outside 5th crosscut 28 E
7:	G. Ciarallo-----	12: 2:	28	Inside 5th crosscut 28 E
31:	John R Cox-----	12: 2:	28	Outside 5th crosscut 28 E
153:	John Delbarto-----	12: 2:	28	Inside 5th crosscut 28 E
43:	Ed Love-----	10:23:	22	28
52:	A.E.Newsome-----	12: 4:	Slope	8th crosscut from basin
216:	Ben Miller-----	12: 4:	Slope	8th crosscut from basin
242:	William Hall-----	12: 4:	Slope	8th crosscut from basin
276:	James Denny-----	12: 4:	Slope	8th crosscut from basin
254:	Robert Evans-----	12: 4:	Air course	8th crosscut from basin

67

70

27

16

9

-:LIST OF MEN KILLED IN MINE, JUNE 30TH. 1903:-

-:COMPANY MEN:-

Check No.	Name.	Date Found.	M:D	Where Found Entry	Room.
	William Pulkanen	✓10	:23:	22	30
	John Norkonen	✓12	:16:	15 Dip	: Near 17 over east
	Joe Jälio	✓13	:4:	Slope	: 8th crosscut from basin
	John Battle	✓12	:6:	26 Back	: Face
	Pete Howley	✓10	:20:	22 Parting	: Inside man way
	John H Cox	✓12	:6:	26 Back	: Face
	James Massey	✓12	:1:	Slope	: 26 Back
	George McKenna	✓12	:13:	17	: Betn. 2 & 3 rooms.
	Axel Matson	✓7	:1:	Slope at 7 Entry	
	John A Saari	✓6	:30:	11 Plane	
	John Boney	✓7	:1:	Slope at 11 entry	
	John B Jones	✓7	:17:	16	1
	Rudolf Salo	✓7	:20:	16	: Opposite 25
	Ed Brown	✓8	:8:	17 Dip	
	Jac Niemisto	✓8	:7:	17 Parting	
	Mat Jarvela	✓8	:8:	17 Dip	: At edge on rock
	Oscar Jacobson	✓8	:8:	17 Dip	: Out edge
	James Smith	✓8	:8:	17 Dip	: Out edge
	James While, Sr.	✓8	:8:	17 Dip	: Out edge
	Job While	✓8	:8:	17 Dip	: Out edge
	Thomas Davis	✓8	:8:	17 Dip	: Out edge
	Axel Gittila	✓7	:21:	Betn. 18 & 20	: On slope
	Mike Sporro	✓7	:21:	18 Parting	
	John B Matson	✓7	:21:	18 Parting	
	Martin Mickelson	✓7	:21:	18 Parting	
	Dave B Jones, Sr.	✓7	:27:	20	: Near 52
	Gust Halberg	✓7	:24:	20 Back	
	James While, Jr.	✓7	:23:	20	
	Felix McKenna	✓7	:16:	Pump room	

-:CONDITION OF MINE AT TIME OF EXPLOSION:-

16 entry- Water line in working order to 43 room. Fire walled off in 36, 37, 38, 39 and 40 rooms, outside fault. Fire walled 41 to 51 rooms inside. One gas watch for this entry, who had no other part of mine to look after. Only 11 men working outside fault, account rooms finished or caved. Pillar gang at 49 and 50 rooms.

18 entry- Water line in working order to 42 room. Fires walled off from 25 to 43 rooms inclusive. Gas watch for this and 17 entry. No men working between 25 and 60 rooms.

20 entry- Water line to 38 room. No fires in this entry, but rooms from 30 to 44 on the move, and only 4 men working the day of the explosion between rooms 30 and 44. Gas watch for this and 22 entry

22 entry- Watered by a hand pump. Set pumps in back entry at swamps and water pumped onto top entry. No fire in this entry.

Shooting- Shots fired by miners all over the mine when necessary. No limit to depth of hole, and judgment of miner for powder required.

Powder- 10 pound can to each digger. one keg to entrymen. Average kegs per day: 30 kegs.

-:AIR:-

120000 cubic feet per minute entering mine. 16000 feet 9 and 11 entries.
11000 feet 17 entry.

27000 ft.

93000 cubic feet per minute at 16 entry, on slope and manway.

-:MEN EMPLOYED IN 16 ENTRY AND BELOW:-

16 entry.	Diggers	21	Company men	3	Mules	3
18 "	"	22	"	3	"	3
20 "	"	39	"	5	"	4
22 "	"	19	"	2	"	1
28 "	"	4	"	2	"	0
Slope	"	5	"	3	"	2
Pump room	"	0	"	1	"	0
Total-	"	110	"	19	"	13

25800 feet- 129 men at 200 cubic feet of air per minute.

6500 feet- 13 mules at 500 cubic feet of air per minute.

60700 feet- To dilute gasses in and below 16 entry

93000 feet.

-:MEN KILLED:-

169.

129 in 16 entry and below where explosion went.

36 in 17 entry Suffocated. No fire or destruction here.

1 in 11 entry Suffocated. No fire or destruction here.

1 On man-way, killed by explosion going up.

2 On slope, killed by explosion going up.

-169-

-:DAMAGE TO MINE:-

SLOPE:- All timber knocked out and slope closed at mouth. Slope caved at bridge, at rock tunnel above 6 entry, between 7 and 8 entries, at 16 entry, between 16 and 18 entries and in the basin at prting. Required three shifts two weeks to clear slope to 10 entry cave. At 5 bridge, between 7 and 8 entries and at 16 entry caved 20 to 30 feet high. Rock stoppings in 1, 3, 4, 5, 6, 7, 8, 9, 12 and 14 entries blown out.

-:DAMAGE TO MINE:-

MAN-WAY:- Timbers knocked out at mouth and man-way closed. Bridge at 5 destroyed. Caved between 5 and 7 entries, 7 and 9 entries, 9 and 11 entries, 11 and 13 entries, 13 and 15 entries, 15 and 17 entries. Some man-way caves 30 feet high. Small caves at 16, 20 and 22 entries.

Air COURSE:-

Every stopping on both sides of air course from fan shaft to seventh crosscut above basin blown out. Undercasts at 7, 9, 15, and 17 stable, Overcasts at 5, 11 and 17 hauling road, back entry undercasts at 11, 13, 15, 16, 18, 20 and 22 entries all blown out. Steam and water lines broken in many places.

ENTRIES:- Stoppings in 11 entry rooms, outside fault, blown out. All stoppings in 13 entry rooms, outside fault, blown out. All stoppings in 15 entry rooms, outside fault, blown out.. These rooms closed account fire.

16 entry:-

Three heavy caves on this entry and numerous small ones. Crosscut stoppings blown out. Had to retimber from first rooms to 36 room. Rooms caved and began to heat. Had to close mouth of 21 outside rooms. Water line under falls in air course, so put in new line.

17 entry:-

Rock tunnel ruined. All cars and electric hoist and electric pump inside log stoppings. Entry closed account fire in stable.

18 entry:-

Rooms 19 to 24 caved to faces, and pillars blown through. Stoppings in 25 to 43 blown out or shattered. Entry caved in many places and as high as 30 feet in some. Crosscut stoppings blown out. Required timbering from 19 to 39 room.

20 entry:-

All rooms from 25 to 44 caved. six men burried in 25 and 26 rooms. Cleaned and timbered 36 room over 300 feet. Was from early in August to December 4th. recovering last body in this room. Cross cut stoppings slope to 25 room blown, and all inside 44 room. 3 bad caves on entry. Retimbered entries 25 to 44.

22 entry:-

Seven rooms caved. Two falls on entry, and all crosscut stoppings but one, blown out and pillar blown through.

PUMPS:- None.

PIPES:- Water lines in entries damaged so that we had to relay with new lines from slope to face.

CARS:-

Lost 25. Damaged 75.

STOCK KILLED:-

7 Horses, 28 Mules. Stable wrecked and closed, account fire.

-:CONDITION OF MINE:-DECEMBER 31st. 1903:-

7 entry:- Ready to work.

9 entry:- Ready to work.

11 entry:- Working. 3 to 11 room.

16 entry:- Pulling pillars at 34 room.

18 entry:- Rooms 13 to 18 inclusive and pulling pillars at 39 room.

20 entry:- Rooms 45 to 63 inclusive, working.

22 entry:- Rooms 13 to 18 - 24 to 42 inclusive, working.

24 entry:- Ready to start January 1st. 1904.

26 entry:- Ready to start January 1st. 1904.

Slope:- Ready to start January 1st. 1904.

-:WATER LINES:-

9	Entry	to	16	Room
11	"	"	"	Face
16	"	"	"	"
18	"	"	"	"
20	"	"	"	"
22	"	"	"	"

-:WORK DONE:-

- A.*
- Slope:- Cleaned 8000 feet. Timbered 500 feet. Rebuilt stoppings in 1, 3, 4, 6, 8, 12, 14, 16, 18; 20, & 22 entries.
- Man-way:- Cleaned 4000 feet. Timbered 1165 feet. Rebuilt stoppings in old man-way and 5, 7, 9, 11, 13, 15 and 17 entries.
- Air Course:- Cleaned ~~2~~²000 feet. Timbered 75 feet. Rebuilt Overcasts ~~5, 11 and 17~~^{5, 11 and 17} entries. Rebuilt undercasts 7 and 15. Rebuilt some temporary, some permanent from fan shaft to face of slope.
- 9 Entry:- Cleared gas to face on both sides of air course.
- 11 Entry:- Cleared gas to face and timbered at slope and plane partings.
- 13 Entry:- Cleared gas to face and timbered on parting and into face Rebuilt stoppings in 1, 2 & 3 rooms.
- 15 Entry:- Cleared gas to face. Timbered entry on parting and into face. Timbered through rock tunnel and dip entry to 17. Rebuilt ⁱⁿ rooms 1, 2, 3, 4, 5, 6, 7 and 8.
- 17 Entry:- Cleared gas to dip. Opened over cave and set sprugs for 300 feet.
- 16 Entry:- Cleared gas to ~~dip~~^{top}. Loaded out caves. Retimbered entry from parting to 36 room. Rebuilt crosscut stoppings and timbered on parting.
- 18 Entry:- Loaded out caves and timbered entry from 19 room to 43 room. Rebuilt stoppings 25 to 39 rooms and in cross cuts between top and back entries. Timbered parting. Cleaned cave in 19 room from september 1st. to October 18th. to recover bodies. Cleaned cave in 20 room from september 1st. to November 11th. to recover bodies. Four men under caves.
- 20 Entry:- Cleared gas to face. Cleaned caves and timbered entry 18 to 44 room and built board stoppings in cross cuts. Built Log stoppings in rooms 27 to 44 inclusive, some of which are 20 feet high. Put in parting at 44 room and lowered and raised track as needed to make a good hauling road. Cleaned caves in 25 room September 1st. to November 30th., 26 room from September 1st to December 4th. to recover bodies. Six men under caves.
- | | |
|----------------------------|-------------|
| 3 Loaders at 3.75 per day, | \$ 11.25 |
| 1 Gang boss, at 3.75 | 3.75 |
| 1 Timbermen at 3.75 | 7.50 |
| 1 Driver at 3.75 | 3.75 |
| | <hr/> 26.25 |
- Spt. 1st. to Dec. 4th.-95 days at 52.50-- \$ 4987.50
- 980 feet Oregon timbers-- at 8¢ 784.00
- Cost of recovering bodies of Nick Thore.* \$ 5771.50
- 22 Entry:- Cleared caves and rebuilt with lumber, stoppings between top and back entries. Timbered entry at caves. Loading outcoal in caved rooms requireing 20 foot props.
- 24 Entry:- OK.
- 26 Entry:- Rebuilt with logs, crosscut stoppings.
- 28 Entry:- Rebuilt with logs, crosscut stoppings.

-:Accidents:-

- FATEL:- None.
- SERIOUS:- NONE.
- NON FATEL TRIBRIAL:- 3.

COST REOPENING MINE AND RECOVERING BODIES AND SETTLEMENTS ONTO HEIRS:-

Labor

Material

Total.

Settlements	\$67851.20
Care Widows	2529.71
Hanna. Hotel.	6097.83
Mine.	30788.26
	<u>\$107267.00</u>
\$83647.24	

\$190914.24

:-RATES OF PAY INSIDE:-

July and August \$3.00 and board, 8 hour shifts.

September, October, November and December 1st. to 15th., 37-1/2 Cents per hour, 10 hour shifts.

:-WATER HANDLED:-

Accumulated while pumps were idle,

11340000 Gallons.

August 15th. to December 1st. 107 days at 250000-

26750000 "

Water handled, not counting condensation on

4" steam line of 6000 feet.----- 38090000 Gallons.

:-GAS REMOVED:-

(Back entries and rooms, not figured in this estimate)

	Size	Cu. Feet Gas.
16 entry,	3000 X 7 X 9	189000
18 "	3400 X 7 X 9	224200
20 "	3600 X 7 X 9	226800
22 "	2400 X 7 X 9	151200
26 "	1200 X 7 X 9	75300
28 "	1400 X 7 X 9	88200
Slope	3000 X 7 X 10	210000
Air course	5000 X 8 X 11	268000
Man-way	4400 X 9 X 12	475200
Plane	1800 X 7 X 10	126000
9 entry,	2000 X 7 X 9	176400
11 "	600 X 7 X 9	37800
11 Tunnel	1200 X 7 X 10	84000
13 entry,	800 X 7 X 10	56000
15 "	800 X 7 X 10	56000
12 "	1600 X 7 X 10	112000
Stable.	400 X 8 X 14	44800
Total		<u>2,600,900</u>

Gas in rooms and in back entries, would double this amount.

CHARGE AT TIME OF EXPLOSION:-

dent.	Service at Hanna Mine	6 Years.
"	"	10 "
Boss driver,	"	12 "
"	Rope runner.	10 "
	Service at Hanna Mine	10 "
& trackman,	"	10 "
er,	"	10 "

.Petit, drove the slope from 15 entry to its face.
and 17 dip 1200 feet on the pitch. 9 entry to face.
inside fault, to face.
to face.
t to ~~rm~~ 40 room.
n to face.
slope and drove to 43 room.
slope and drove to face.
slope and drove to face.
and drove to face.
and drove to face.
drove to face.

12, 13, 14, 15, 16 and 17 entries.

by gas in going into his place in the
or up finished rooms for material.

and in an entry to necessitate taking

work badly enough to lay off, in ten
days.

was working in 28 entry. Fired a
with naked light. Fired the gas as

ut his hole for the cartridge.
chute and filled chute with coal.

orders to use them. With such a
ng.

ne so much so, that we have made
ers, before allowing them to

er average air at intakes 120000
xcept when Mine Foreman had been
ged accordingly.

een known to put a chalk mark on a
their place, have heard him tell

dy. An inch pipe is taken from the
e time.

ng order. Plenty of water in the sump,
entries watered when they needed it.

All they had to do, ~~to~~ to tell pumper
men put a piece of hose on valve and
in the entry required it.

had ten years as gas watch in this mine,
of gas being fired in his district.

andoned workings when killed.

een through, and the cold air coming down the slope,
ld have been a total wreck.

If the men in back entry had not left the face long before the explosion reached it, they would never have. If they had not been between the cross cut at 25 and the one blown out inside 44 when the fire passed along top entry, they would have been burned or maimed by flying stopping blocks. As it was they had traveled along back entry to the first open cross cut and died there. 20 entry had only four rooms turned inside 44 room. Believe the men made the rush at the first intimation. With only the width of the entry where they were, they had all the air and noticed tactions quicker than the men up the rooms. Where we found the inside driver, trip and snubbers mule near 32 room, it looked as if a fearful force had came down a room. Snubber was driven into last car, wedged between car and lower rib. From 20 entry to 22 on man way, another gun barrel. When it reached 22 entry, a trip of loads outside manway was pushed out, putting two cars onto slope. Four loads inside man way had only first car damaged. Seven empties inside man way, had first car torn to pieces. Why was not the force here sufficient to wreck the trip across the manway? I believe, because the air was warmer and mixed so with the air from further down the man way, that it could not expand with force enough to do it. That coming down the slope turned the two cars over without injuring. Going into 22 entry, it took the stoppings to 13 room. Passed through the block and took the stoppings and entry pillar between the blocks, went up 24 room and down 30. Passed along the entry to face. No signs of fire at face. Powder keg not exploded. Brattice frame standing and some of the men had run from their place at the face to last crosscut. No caved rooms on this entry before the explosion. No reason why flames should not have gone to face of the entry. No rooms turned inside 30 room. Believe flame died for want of air to carry it to face. Explosion went down man way to 24 entry where man trip was kept. Did not force a car out on slope. Only damage to man trip was to seats and standards. Cars ~~were~~ not piled, but trip strung ~~out~~ as it had been left before explosion. From 24 to 26, it was confined to the man way. Entry 26 gave it a chance to expand again and show its force. No rooms turned on 26 or 28 entries and crosscuts 200 feet apart. Trip of empties in 26 back entry stood inside fourth cross cut from slope. Outside fifth cross cut on 28 entry and got the force of the explosion on both ends, as cross cut stoppings went out. These entries were short and the explosion was confined to the width of the three entries. Believe that is why empty trip was so badly damaged. Fire reached face of 26 back and exploded powder in 28 entry. The cross cut where powder was, is close to empty trip and may have had a great deal to do with wrecking cars, on these entries. Explosion came out through these entries onto slope, as shown by left in 26 and 28 entries, which were slightly damaged, and continued up slope. Four loads on rope on slope plane, ~~were~~ standing between the fourth and fifth cross cuts from basin. They got the full force, which spread the first car on trip. Did not knock the coal off the other three. Its force grew less for want of air to carry it up the slope. Before it reached the 7 cross cut above basin, was too weak to take out the stoppings. We knocked in the 7 cross cut stopping to clear the gas, as we opened up the slope. Dust, in my opinion, caused the explosion, and the exploding of the diggers powder, materially assisted. Fire damp may have assisted in 20 entry, but no where else. That the great amount of fresh air on the slope and man way made it so destructive, feel sure. In the air course, the air was charged with fine particles of dust and warm. There was no force shown in the air course. Every stopping blown into it. As it went up the fan shaft, had just force enough to lift roof off shaft. Did not knock the sides out of house over shaft. While the explosion was going down, it was also going to surface. When it reached 17 hauling road, a part of it went in, the rest going up. At 15 entry it turned in, taking all the stoppings in the eight rooms, through rock tunnel with force enough to take out the log stopping in 15 over cast and fill dip entry with smoke. Believe every man would have come out of 17 entry but for this. Feel sure they tried the door on 17 and found the dip full of smoke. Turned into 13, taking room stoppings and only the reduced size of the entry from heaving in the tunnel, saved the stoppings on 13 top and back entries. Turned into 11 entry, taking some room stoppings outside fault, 12 and 13 rooms being open, expanded up these and passed into tunnel without much force and no flame, but lots of smoke. Boney surely met this smoke and was suffocated trying to get back to plane. The fresh air coming down the plane diluted the smoke sufficiently to keep the men in 11 alive, though unconscious.

-:CAUSE OF EXPLOSION:-

Leve explosion was caused by a shot. Too much powder for the work required. Force expended on the air in the room. This would raise the dust in the room, check the movement of the air into the place, and increase it going out for an instant. The increased movement, both in and out, would tend to make more dust. Whether the dust fired from the powder gasses on return of the fresh air, or from a gas feeder opened by shot, or the amount of powder, was enough to throw flames into it and fire it, cant say. Powder cans exploded as fire passed along the rooms, raising more dust and feeding the flame. That it was a shot and a bad one, is borne out by the position of the inside driver and his trip. He was caught near 25 room. The cross bar above him held, but the one inside broke and the lagging dropped onto the second car of his trip, completely blocking the entry. Sam Hudspeth, a digger, was working near 15 room on the entry. He was literally torn to pieces. All the men outside 25 room were found dead at their places. All inside had run down. If the trip had been clear when the force that took the log stoppings and hurled Hudspeth struck it, trip would have been ditched and driver blown inside trip. I believe the shock from the shot brought down the timbers, and the driver jumped then. He and his mare showed evidence of but little fire. The mare only singed, and his face burned slightly. Only had to pull the lumps off top of car to release him. Inside of 25 room, every man in the entry was found away from the place he worked. The two men in back entry outside fault had run from their places, got their oil can and dropped in cross cut. Stoppings in 38, 39 and 40 rooms were blown, but the two men 200 feet inside in back entry, had come out on top entry. My theory is, that every man in the mine knew from the action of the air in his entry in ten seconds after the shot, something was wrong. As the fire passed out 16, it burned all the air coming into entry. The fire traveling into the entry, had nothing but the air on the inside to feed on, and this air was rushing towards the fire. The air was warm and had no great expansion. For this reason, believe fire did not travel far into this entry. There was no air left inside the fault and the men dropped along the entry trying to get out. We found the props burned on upper side in room number one, and lower side room 6. Believe explosion started ~~it might have been windy. Still the two diggers were lying~~ a blasting barrel in the hole. of it, and it could not have started from it. On a prop near the crosscut near that had not exploded. From June to July 18th. or more then two weeks had elapsed before we got into these rooms. Conclusive evidence perhaps, hurried by caves. As the explosion went out, it had the fresh air of the entry, now charged with dust, to feed on, increased by, God only knows how much more of the 93000 feet coming down man way and slope. The wreckage on the parting showed it to be terrific. When it reached the man way and turned down, it was like going into a gun barrel, no chance to expand until it reached 18 entry and plenty of fresh air filled with dust to feed it. The wreck on 18 parting showed its force when it had the chance to expand. While the explosion traveled down to 18, it was also going out, on man way and slope. No air was coming from above, and I believe there was but one movement of the air below, and that was toward the explosion. There must have been almost a Vacuum between the two fires. As the fire went into 18 entry, it took all the crosscut stoppings, up 19 room and down 24, killing the men where it found them. Blowing in the log stoppings in mouths of rooms. Here I theorize again. Believe the air from the inside of 18 entry was moving out. Fire never reached the men inside, because the air was warm and had been used by the men and it died along the entry for want of oxygen to feed on. dust it had, not it was, but could go no further. So great was the expansion on 18 entry parting that the flame crossed the entry to find itself again in a gun barrel with plenty of fresh air, manway damp, but heat great enough to dry it and burn the dust as it went. The force on 20 entry was shown by blowing the empties across the parting. Loaded trip had just gone out. Passed into 20 entry taking out cross cut stoppings up 13 and down 18 room, killing men in their rooms. Caught driver outside 13 room and tore an arm off. Drove trip toward the inside. Here again was the force shown, for no rooms were turned and trip caught between cross cuts. Now the gas theory seems tenable. There were only four diggers left between 30 and 44 June 30th. on this entry. Rooms from 30 to 44 had been caving and men had been pulled out. When the fire reached these rooms, some of them could have caved since. 5 AM. the force of the explosion could have brought the top down, and with it gas; This gas in caved rooms could have fired and made the flame reach the face. ~~after the men were gone.~~

-:RECOMMENDATION:-

The coal be mined or cut, and shots fired by shot firers when men are out of mine.
 Where this is impracticable, shot firers fire for the men, but make them do some mining or cutting. Place to be wet face before firing.
 Depth of deepest hole, 4-1/2 feet.
 Maximum length of Cartridge, 18 inches. Needles only, to be used.
 Am having men now, mine their coal.
 Hole to be fired is measured by shot firer and place watered before firing. Diggers allowed 5 Pounds Powder, Entry men 10 Pounds.
 Turn entries from upper side on east outcrop and push them to their distance.
 Connect with 17 dip, and crowd dip, 19 and 21 entries.
 The fires in upper old working, are a menace to the mine and men.
 Drill into old manway, 1, 2, 3 and 4 entries and fill with mud.
 Fire in 3 back entry not 10 feet off aircourse now.
 The mine will take care of 200 diggers for the next two years, with 17 entry, which should be reached in six months.
 Would turn no rooms on entries until entry has reached its distance.
 This would avoid the heavy expense of maintaining hauling road. Timbering entry and closing mouths of rooms that will fire when they cave.

-:HANNA:-

The following employes are entitled to honorable mention for their faithful services during the most dangerous part of the work. We had valuable assistance from other company mines, and from other companies, but the men were coming and going:

J. O. Hoken,	Pipeman.	Aaron Madden,	Colored.
Enoch Vaughan,	"	Andy Raines,	"
Jack McNeiss,	"	John Chambers,	"
Chas. McKenna,	"	Wm. McDonald,	"
Hy. Wain,	"	John Grace,	"
John Keeki,	"	John E. Wilson,	"
		Chas. Haines,	"
Chas. Eskola,	Timberman,	Walter Carter,	"
J. X. Maki,	"	W. L. Walker,	"
Mat Lynn,	"	Gus Rainey,	"
Mat Joki,	"		
J. K. Johnson,	"		
Jac. Bollar,	"	G. R. Sutton,	Out side.
Mat Kerty,	"	Thos. Butler,	"
Emil Salme,	"	Thomas Love,	"
Mat Huhta,	"	Dave Jones,	"
J. O. Johnson,	"	Olaf Olson,	"
		J. D. Crilley,	"
Andy Neime,	Finn Laborer.		
Gus Ayala,	"	Joe Borton,	Gas Men. & Pumper
Jack Glat,	"	Richard Wilson,	"
John Matson,	"	Frank Collins,	"
V. Williamson,	"	J. B. Evans,	"
Nick Johnson,	"	Andy Gault,	"
Mat Kaskella,	"	James Webb,	"
M. Hurlanda,	"	P. Gillen,	"
V. Haklo,	"	Murry Ryburn,	"
W. Takkenen,	"	Tim Ryarnon,	"
C. Navi,	"	Sil Marsh,	"
John Jackson,	"	Fred Johnson,	"
Albert Kovi,	"		

-:THE UNION PACIFIC COAL COMPANY:-

Hanna, Wyo. July 27th. 1904.

Mr. D.C. Clark,

Vice President and General Manager,

Oreoka, Neb.

Dear sir:-

As per yours 22nd. Charges to Explosion.

Labor	\$ 23647.24	
Material	131461.65	\$215108.89

To recover and inter 166 bodies.	Labor \$19749.50	Material \$5006.80	Total \$25656.40
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To clean up and put mine in shape to resume operation,	63897.74-42704.75	\$106602.49	
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Claims settled, 157	32850.00	328250.00	
	23647.24-131461.65		\$215108.89

Claims to settle.

Tom Davis,	\$350.00	Ant. Ford,	\$1750.00
D.B. Jones,	350.00	Felix McKenna,	900.00
Jas. Watson,	350.00	Jas Massey,	1050.00
Pete Hawley,	350.00	Maki,	225.00
Geo. McKenna,	350.00	Jno. Klassen,	1100.00
	<u>1750.00</u>	Jas Smith,	1050.00
		Jno. Cox, Sr.,	850.00
		Jno. Cox Jr.,	850.00
			<u>5775.00</u>

E. J. Brock
Mine Supt.