

### INTRODUCTION

This report is based on an investigation made pursuant to clause (1) of Section 4 of the Federal Metal and Nonmetallic Mine Safety Act (80 Stat. 772).

Reference numbers used in the report identify mine safety standards promulgated in the Federal Register, Vol. 34, No. 145, Thursday, July 31, 1969; Vol. 35, No. 38, Wednesday, February 25, 1970; and Vol. 35, No. 237, Tuesday, December 8, 1970.

A fall-of-ground accident at the Homestake Mine - Ross Shaft, Homestake Mining Company, Lead, Lawrence County, South Dakota, resulted in the deaths of three underground employees. A fourth man in the stope at the time escaped injury. The accident occurred at approximately 8 p.m. March 21, 1972, in 32-33 D Stope, 19 Ledge, 5900 Level.

James L. Skalsky, age 48, extra shift boss, had 18 years of mining experience, 2½ years of which were as an extra shift boss. He is survived by his wife and two dependent children. Harry J. Kinney, age 27, miner 2nd class, had 3 years of mining experience and is survived by his wife and two dependent children. Gary L. Schamber, age 22, miner 2nd class, had 1 year of mining experience and was single. The mining experience of the victims was all at this property.

The Duluth office of the Bureau of Mines was notified by telephone of the accident on March 22, 1972, by L. R. Bunch, Safety Director. An investigation was conducted on March 22 and 23, 1972.

Information in this report was obtained during a visit to the scene of the accident and in interviews with company officials and employees.

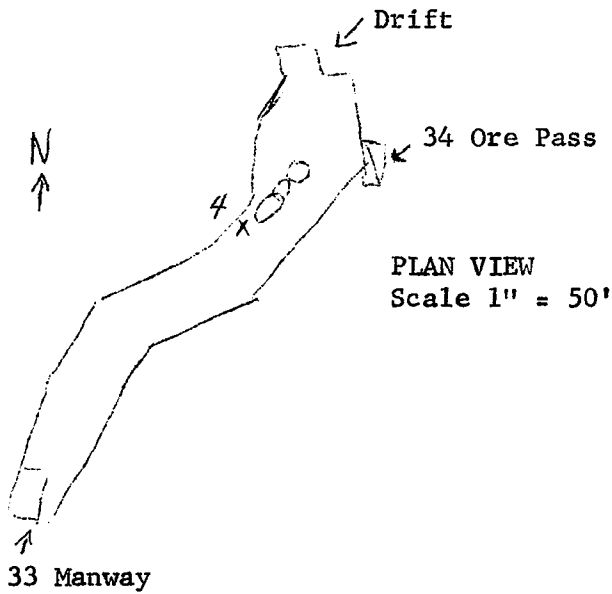
### GENERAL INFORMATION

The Homestake Mine - Ross Shaft, an underground gold operation, was located within the city limits of Lead, Lawrence County, South Dakota. The mine was owned and operated by the Homestake Mining Company.

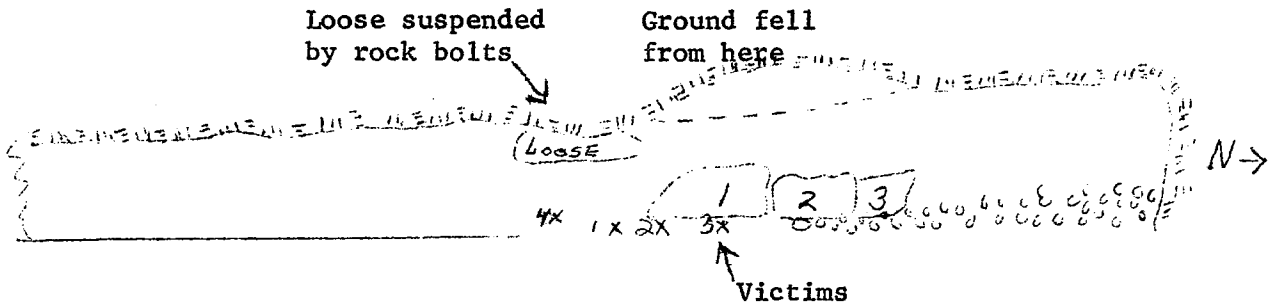
The mine was opened by two ore production shafts. Ore was mined using the cut-and-fill and square-set stoping methods. Integrated operations of mining, milling, and smelting were conducted on the property.

Operating officials were: J. O. Harder, Manager  
D. T. Delicate, Manager of Mining & Assistant  
Manager  
J. K. Waterland, Mine Superintendent

MULTIPLE FATAL FALL-OF-GROUND ACCIDENT  
 HOMESTAKE MINE - ROSS SHAFT  
 HOMESTAKE MINING COMPANY  
 LEAD, LAWRENCE COUNTY, SOUTH DAKOTA  
 MARCH 21, 1972



View Looking West  
 Scale 1" = 20'



- 1x - James Skalsky
- 2x - Harry Kinney
- 3x - Gary Schamber
- 4x - Adelbert Adkins (escaped injury)

- Rock #1 - 12 feet by 5 feet by 4½ feet
- Rock #2 - 8 feet by 6 feet by 3½ feet
- Rock #3 - 7 feet by 4-2/3 feet by 1-1/2 feet

Loose rock suspended by rock bolts 10 feet by 7 feet by 2½ feet

A total of 1839 men was employed at the property, 1030 of whom worked in the mining department. The mine was operated during two 8-hour production shifts a day, 6 days a week.

Participating in this investigation were:

Homestake Mining Company

Hollis Miller, Assistant Safety Engineer  
Adelbert Adkins, Shift boss, extra foreman, and witness  
John Henninger, Shift boss

United Steelworkers of America, Local 7044

Charles Moran, Safety Committeeman  
Dallas Tinnell, Safety Committeeman

State of South Dakota

Iren Borup, Sr., State Mine Inspector

United States Bureau of Mines

Robert L. Moore, Mining Engineer  
Chester F. Schmidt, Metal and Nonmetal Mine Inspector

The last health and safety inspection was completed on March 15, 1972.

DESCRIPTION OF ACCIDENT

On the day of the accident, Harry J. Kimney and Gary L. Schamber, both miners, began work at the usual time of 6 p.m. The two miners were assigned to work in 32-33 D cut-and-fill Stope, 19 Ledge, 5900 Level. During the previous shift, a 32-hole drift round and a 9-hole slab round had been drilled and blasted in the drift at the north end of the stope.

At approximately 7:45 p.m., James Skalsky, shift boss, accompanied by Adelbert Adkins, night foreman, witness, entered the stope on Skalsky's usual rounds.

When Adkins entered the stope, he noticed the back and the walls had been wet down and the miners were barring down in the stope. Adkins reported that he did not observe any unusual ground conditions in the stope, and ground conditions were not discussed between the miners and supervisors.

Skalsky, the two miners, and Adkins sat down adjacent to 34 ore pass and discussed the work schedule for that shift, which consisted of slushing out the drift and slab rounds that had been blasted by the previous shift and also the drilling of another drift round and slab round. Skalsky then made out some sample tags for the miners. After the sample tags were made out,

the four men got up and started walking toward the south end of the stope. Adkins was in the lead, followed by Skalsky, Kinney, and then Schamber. Skalsky and Adkins were going to leave the stope, and Kinney and Schamber were going to get the slusher ready to slush out the previously blasted drift and slab rounds. They proceeded about 20 feet, when Adkins said he heard simultaneously a yell and a rock snap and crack. He threw himself against the west wall and landed on his side, from where he saw a large rock fall on Skalsky, Kinney, and Schamber.

After the fall, Adkins got up and tried to locate the others. Not being able to see any of them, he climbed to the 5750 Level for help. When help arrived, recovery operations were started after six stulls had been placed to support additional loose ground around the area. The first victim was removed from the mine at 10:45 p.m. and the last victim at 2 a.m.

The rock which fell on the victims broke into a number of pieces upon impact, but it was estimated to have been originally approximately 24 feet long, 6 feet wide, and from 1½ to 4 feet thick.

The two miners and shift boss on the opposite shift stated that during the previous shift the rock which fell showed no signs of cracks. However, they also stated that there was some unstable ground to the northwest of the area involved in the accident. The miners stated that they were unable to bar the material down and that they had discussed with the shift boss what ground-control measures should be taken. Since the unstable ground was not in the area where work was being done and not located where the men had to travel, no further ground-control measures were taken. The men and the shift boss decided that stulls would be put in place under the unstable ground when they had to work in that area.

Since the known unstable ground was still in place at the time of the investigation, what bearing it had on the accident could not be determined.

Skalsky and one of the miners were notified of this loose material before the shift started.

During the investigation, a 2½-inch-wide crack was observed along the hanging wall where the ground fall occurred, and loose ground was also observed on the hanging wall to the south of where the fall occurred.

#### CAUSE OF ACCIDENT

The direct cause of the accident could not be determined. A contributing factor may have been that due to the size of the rock which fell, presently employed methods of detecting loose material were not adequate.

#### NOTICES ISSUED

57.3-22 (Notice No. 20) Loose ground was observed in 32-33 D Stope, 19 Ledge, 5900 level. Shall be abated by March 31, 1972.

RECOMMENDATIONS

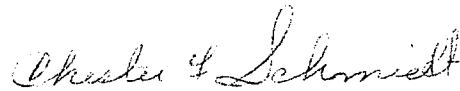
Consideration should be given to reevaluating and reviewing the presently employed means of detecting loose ground.

ACKNOWLEDGMENT

The courtesy and cooperation of company officials and employees is gratefully acknowledged.

/s/Robert L. Moore

Robert L. Moore  
Mining Engineer

  
Chester F. Schmidt  
Metal and Nonmetal Mine Inspector