FAI-6972927-1

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Dimensional Granite)

Fatal Falling, Rolling, or Sliding Rock or Material of Any Kind Accident
August 5, 2023

Echols Mill Quarry 1 and 2
Savannah Valley Quarries, LLC
Lexington, Oglethorpe County, Georgia
ID No. 09-01187

Accident Investigators

Richard Woodall
Mine Safety and Health Inspector

Nicholas Basich
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Birmingham District
1030 London Drive, Suite 400
Birmingham, AL 35211
Brian Thompson, District Manager

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OVERVIEW

On August 5, 2023, at 9:31 a.m., David Griffin, a 42 year-old ledgeman with over 16 years of mining experience, died after a granite block fell from the quarry wall and struck him.

The accident occurred because the mine operator did not correct hazardous ground conditions.

GENERAL INFORMATION

Savannah Valley Quarries, LLC owns and operates Echols Mill Quarry 1 and 2 (Echols Mill). This mine is a surface dimensional granite mine located in Lexington, Oglethorpe County, Georgia. Echols Mill employs 24 miners and operates one eight-hour shift, five days per week. The mine blasts, drills, channel-burns and manually separates dimensional granite in an open pit and transports the rock by truck to an offsite finishing mill.

The principal management officials at Echols Mill at the time of the accident were:

Chapin Phillips	Chief Executive Officer
Kenneth Niko	Quarry Manager
Arnold Jaudon	Foreman

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on February 22, 2023. The 2022 non-fatal days lost incident rate for Echols Mill was zero, compared to the national average of 1.17 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On Saturday, August 5, 2023, at 6:30 a.m., Griffin; Greg Bunch, Crane Operator; Apolinar Gallegos, Ledge Foreman; Jorge Gallegos, Ledgeman; and Martin Gallegos, Ledgeman, reported for work. Adverse weather earlier in the week resulted in the miners losing work time, so the miners were working on the weekend to make up for this lost time.

According to interviews, A. Gallegos went down into the quarry and completed the workplace examination while Bunch performed a pre-operational inspection on his crane in preparation to lift the granite blocks out of the quarry. After A. Gallegos finished his workplace examination, he returned to the top of the quarry. At this time, J. Gallegos, M. Gallegos, and Griffin used ladders to descend into the quarry. There, they began hooking up chains to the granite blocks to lift them out of the quarry.

A. Gallegos relayed signals from J. Gallegos in the quarry to Bunch in the crane because Bunch did not have a line of sight into the quarry. Bunch lifted three blocks of granite from the quarry without incident. However, a fourth block was not fully cut loose from the quarry wall and did not lift freely. J. Gallegos instructed Griffin and M. Gallegos to move back further away because of the strain on the chains and hooks applied by the crane. Griffin and M. Gallegos moved to the opposite end of the bench and stood below a different granite block, which was the block that caused the fatal accident.

A. Gallegos told investigators that during the previous day, the block that caused the fatal accident (accident block) could not be lifted by the crane alone because it was partially attached to the wall. A. Gallegos, J. Gallegos, and Bunch made plans to blast this granite block loose from the wall the following week when Arnold Jaudon, Foreman, would return to work as he was the only person qualified to conduct blasting.

According to interviews, sometime before 9:30 a.m., the fourth block broke loose while pulling on it with the crane. During interviews, miners stated the ground vibrations from this fourth block breaking loose were strong enough to break the accident block free from the quarry wall. The accident block fractured into three pieces. One of the pieces fell and struck M. Gallegos and Griffin. (see Appendix A)

J. Gallegos heard Griffin scream and saw him laying on the bench immediately above the quarry floor. J. Gallegos then saw M. Gallegos was laying on the quarry floor with a granite block pinning him down. J. Gallegos signaled up to A. Gallegos, who climbed down into the quarry to the accident scene. A. Gallegos returned to the top of the quarry, instructed Bunch to call 911,

and began gathering chains to lower down into the quarry. At 9:31 a.m., Bunch called 911 and then lowered the chains down to lift the granite block off of Griffin and M. Gallegos. Bunch lifted the granite block completely out of the quarry.

At 10:01 a.m., Oglethorpe County Emergency Medical Services arrived at the mine, conducted triage, and transported Griffin and M. Gallegos to the hospital. Jason Lewis, Deputy Coroner, pronounced Griffin dead at 12:25 p.m.

INVESTIGATION OF THE ACCIDENT

On August 5, 2023, at 9:43 a.m., Susan Hunnicutt, 911 Operator, called the Department of Labor National Contact Center (DOLNCC). The DOLNCC contacted Rory Smith, Staff Assistant. Smith sent Robert Ashley, Supervisory Mine Safety and Health Inspector, and Robert Johnson, Mine Safety and Health Inspector, to the mine. At 3:06 p.m., Ashley issued an order under the provisions of Section 103(k) of the Mine Act to ensure the safety of the miners and preservation of evidence. Smith contacted Scottie Sizemore, Supervisory Mine Safety and Health Inspector, who contacted Richard Woodall, Mine Safety and Health Inspector, and assigned him as the lead accident investigator. Smith also contacted Nicholas Basich, Mine Safety and Health Inspector, and assigned him to the accident investigation team.

On August 6, 2023, at 10:00 a.m., Woodall arrived at the mine site to continue the investigation. MSHA's accident investigation team conducted an examination of the accident scene, interviewed miners and mine management, and reviewed conditions and work practices relevant to the accident. Recognizing that the miners had limited English language proficiency, Norberto Ortiz, Mine Safety and Health Training Specialist, served as interpreter. See Appendix B for a list of persons who participated in the investigation.

DISCUSSION

Location of the Accident

The accident occurred in the quarry in an area known as the "small hole," on the second granite wall. At the time of the accident, miners were working on a block of granite on the East-Northeast end of the quarry wall which was 34 feet long, 54 inches wide, and 34 inches high (see Appendix C).

Weather

The weather at the time of the accident was 83 degrees Fahrenheit with fair skies. Investigators determined that weather did not contribute to the accident.

Examinations

According to interviews, between 7:00 a.m. and 7:15 a.m., A. Gallegos conducted a workplace examination of the quarry and other areas of the mine. He stated he looked at the granite block that fell, and it was in the same position as on Friday when they tried to remove it, so he didn't think it would move. He left the quarry floor and went to an area near the crane while Bunch did a pre-operational inspection of the crane. Once Bunch completed his pre-operational inspection,

the miners started pulling blocks from the quarry wall. The mine operator's ground condition examination complied with MSHA's requirements.

Ground Conditions
At the time of the accident, M. Gallegos and Griffin were standing within four feet of the granite block that was left hanging on the quarry wall. Significant ground vibrations occurred as the crane lifted and broke loose the fourth block, while M. Gallegos and Griffin were standing over 35 feet away. The vibration of lifting of the fourth block caused the granite block, that M. Gallegos was standing by, to fall striking both miners.

Training and Experience
Griffin had over 16 years of mining experience and nearly two years of experience at Echols Mill. Records indicated Griffin received all training in accordance with MSHA Part 46 training regulations.

ROOT CAUSE ANALYSIS

The accident investigation team conducted an analysis to identify the underlying causes of the accident. The team identified the following root causes, and the mine operator implemented the corresponding corrective actions to prevent a recurrence.

1. Root Cause: The mine operator did not correct hazardous ground conditions.

   Corrective Action: The mine operator developed and implemented written procedures regarding proper examinations of ground conditions, when to conduct them, what to look for, and actions to take when examiners identify hazards. The mine operator trained all designated miners in the new procedures.

CONCLUSION

On August 5, 2023, at 9:31 a.m., David Griffin, a 42 year-old ledgeman with over 16 years of mining experience, died after a granite block fell from the quarry wall and struck him.

The accident occurred because the mine operator did not correct hazardous ground conditions.

Approved By:

________________________________ ______________
Brian Thompson Date
District Manager

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Savannah Valley Quarries, LLC on August 5, 2023.

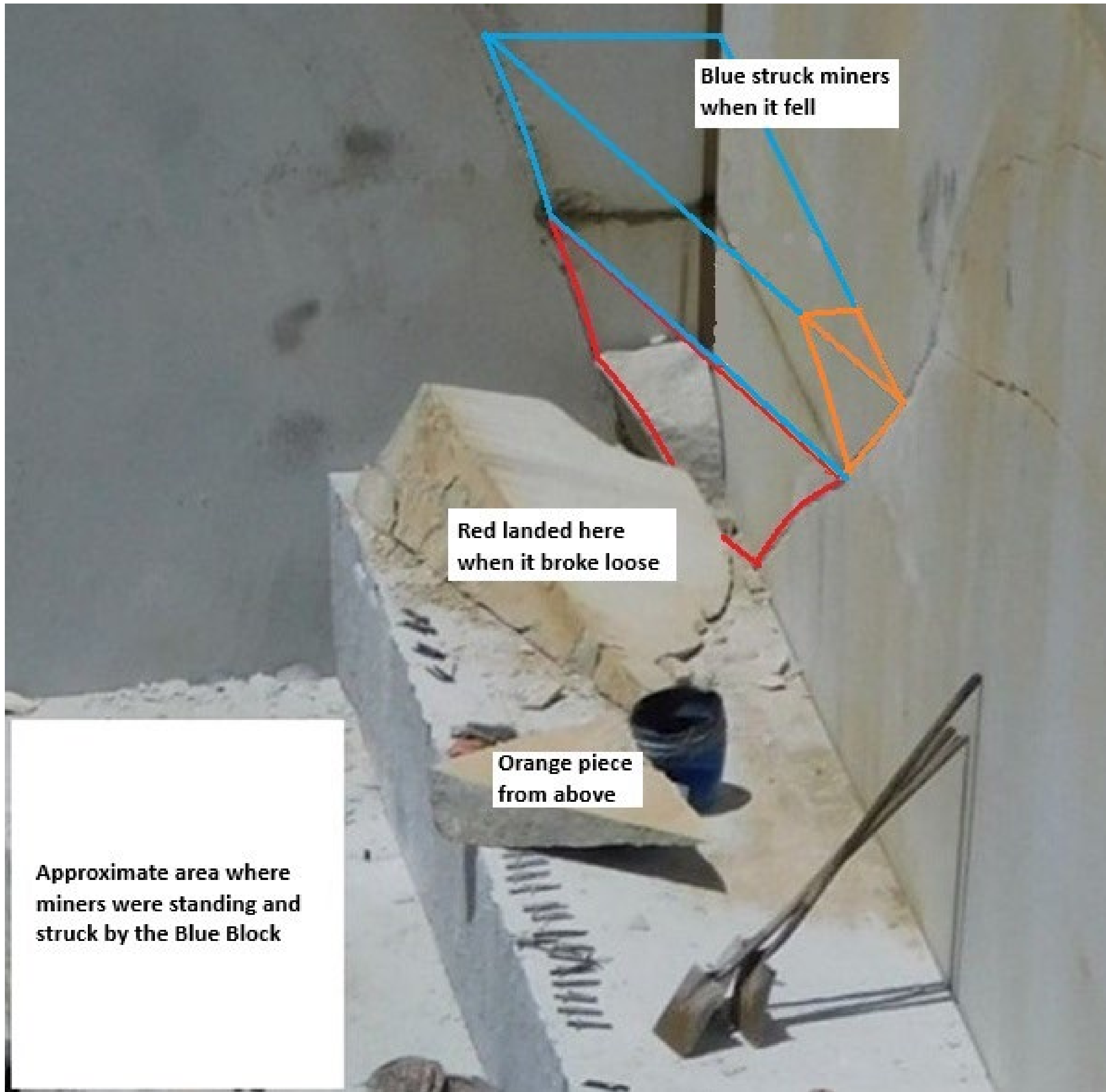
   A fatal accident occurred on August 5, 2023, at 9:31 a.m. This order is being issued under the authority of the Federal Mine Safety and Health Act of 1977, under Section 103(k) to insure the safety of all persons at the mine and requires the operator to obtain the approval of an authorized representative of MSHA of any plan to recover any person in the mine or to recover the mine or affected area. This order prohibits any activity in the affected area. The operator is reminded of the obligation to preserve all evidence that would aid in investigating the cause or causes of the accident in accordance with 30 CFR 50.12.

2. A 104(a) citation was issued to Savannah Valley Quarries, LLC for violation of 30 CFR 56.3200.

   On August 5, 2023, a fatal and serious injury accident occurred at this mine when a granite block fell from the quarry wall and struck two miners. The mine operator did not take down the hazardous ground conditions, post warnings against entry, or place barriers to impede unauthorized entry prior to work commencing. The mine operator knew that the granite block that was left from the previous day was still in place and was not removed from the quarry wall. The granite block collapsed on top of the two miners in the area, resulting in a serious injury to one miner and fatally injuring the second miner.

APPENDIX A – Accident Granite Block

Sketch of the wedge-shaped granite block that broke loose and fell, hitting the two miners.



APPENDIX B – Persons Participating in the Investigation

Savannah Valley Quarries, LLC

Name	Title
Kenneth Niko	Quarry Manager
Arnold Jaudon	Foreman
Apolinar Gallegos	Ledge Foreman
Greg Bunch	Crane Operator
Jorge Gallegos	Ledgeman
Martin Gallegos	Ledgeman

Elbert County Coroner's Office

Name	Title
Jason Lewis	Deputy Coroner Elbert County

Elberton Granite Association

Name	Title
Mathew Pruitt	Association Safety Consultant

Mine Safety and Health Administration

Name	Title
Brian Thompson	District Manager
Rory Smith	Staff Assistant
Robert Ashley	Supervisory Mine Safety and Health Inspector
Nicholas Basich	Mine Safety and Health Inspector
Robert Johnson	Mine Safety and Health Inspector
Richard Woodall	Mine Safety and Health Inspector
Brett Calzaretta	Mine Safety and Health Training Specialist
Norberto Ortiz	Mine Safety and Health Training Specialist

APPENDIX C – Overhead View of Accident Scene