

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Crushed Limestone)

Fatal Powered Haulage Accident
August 25, 2025

Colt Rock and Lime, LLC - Scott City
Colt Rock and Lime, LLC
Scott City, Scott County, Missouri
ID No. 23-02459

Accident Investigators

Rexdon Boliard
Mine Safety and Health Inspector

Douglas Combs
Mine Safety and Health Inspector

Nicholas Lands
Supervisory Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Vincennes District
2300 Willow Street
Vincennes, Indiana 47591
Mary Jo Bishop, Acting District Manager

TABLE OF CONTENTS

OVERVIEW	1
GENERAL INFORMATION	1
DESCRIPTION OF THE ACCIDENT	2
INVESTIGATION OF THE ACCIDENT	2
DISCUSSION	3
Location of the Accident	3
Weather	3
Equipment Involved	3
Examinations	4
Training and Experience	4
ROOT CAUSE ANALYSIS	4
CONCLUSION	5
ENFORCEMENT ACTIONS	6
APPENDIX A – Persons Participating in the Investigation	7
APPENDIX B – Aerial Photo of the Pit Ramp	8



OVERVIEW

On August 25, 2025, at 7:20 a.m., Ethan Amberger, a 26-year-old haul truck operator with over 6 years of mining experience, died when the haul truck he was operating drove over a berm on the pit ramp, fell 39 feet, and landed with its cab submerged in water.

The accident occurred because the mine operator did not: 1) ensure that operators of self-propelled mobile equipment maintain control of the equipment while it is in motion, 2) ensure that seat belts were worn in haul trucks, 3) provide signs warning of hazardous conditions on the pit ramp, and 4) construct a berm along an elevated roadway capable of moderating or limiting the force of the haul truck with regard to traveling over the bank of the roadway.

GENERAL INFORMATION

Colt Rock and Lime, LLC owns and operates the Colt Rock and Lime, LLC - Scott City mine, a surface limestone mine in Scott City, Scott County, Missouri. The mine employs eight miners and operates one 10-hour shift, 5 days per week. Colt Rock and Lime, LLC blasts limestone from multiple benches in the pit. Miners use an excavator to sort the limestone and haul trucks transport it to a hopper that feeds the limestone into the plant, where it is crushed and sorted. The limestone then exits the plant and is stockpiled for sale.

The principal management official at the Colt Rock and Lime, LLC - Scott City mine at the time of the accident was:

Cade Smith

Owner

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on August 20, 2025. The 2024 non-fatal days lost incident rate for Colt Rock and Lime, LLC - Scott City was 24.06 compared to the national average of 1.22 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On August 25, 2025, Amberger arrived at the scale house to start his shift at approximately 5:30 a.m. At 6:00 a.m. Amberger attended the weekly safety meeting held by Cade Smith, owner, and received his job duties for the day. C. Smith assigned Amberger to perform his normal duties of operating a haul truck to transport shot material out of the pit to the hopper.

Before driving his haul truck, Amberger performed a daily pre-operational inspection on his haul truck. At 6:22 a.m., Amberger finished the pre-operational examination and drove his truck from the parking area into the pit to receive a load of shot material. Timothy Ellis, foreman, was operating the excavator in the pit to load the haul trucks.

At 7:18 a.m., Amberger entered the pit for his fifth trip of the day. With a loaded excavator bucket, Ellis waited for the next haul truck to arrive for loading when he observed Amberger's haul truck traveling at high speed down the pit ramp. While rounding a curve, the haul truck drove over the outside berm and left the pit ramp. The haul truck fell 39 feet and landed on the roof, which caused the cab to be submerged in the water below.

Ellis called over the radio, that a haul truck went over the berm. Ellis then called C. Smith on the phone and told him that Amberger had driven over the berm of the pit ramp and that his truck was upside down in the water with its cab partially submerged. C. Smith drove to the bottom of the pit ramp and entered the water to rescue Amberger from the truck. The water was murky and 4 to 5 feet deep. When C. Smith searched inside the haul truck cab, he was unable to locate Amberger.

Ellis called emergency services when C. Smith jumped into the water. The Scott City Fire Department, Cape Girardeau Fire Department, North Scott County Ambulance District, Scott City Police Department, Scott County Sheriff's Department, and a heavy-duty wrecker from Twin City Auto arrived on scene. Emergency responders used an excavator to upright the cab of the haul truck to recover Amberger from the cab. At 12:48pm, Amberger was removed from the haul truck and was pronounced dead by John Caudle, Scott County coroner.

INVESTIGATION OF THE ACCIDENT

On August 25, 2025, at 7:25 a.m., Paige Smith, safety director for Colt Rock and Lime, LLC, called the Department of Labor National Contact Center (DOLNCC) to report an injury with

reasonable potential to cause death. The DOLNCC notified David Stepp, assistant district manager. Stepp informed Nicholas Lands, supervisory mine safety and health inspector. Lands and Douglas Combs, mine safety and health inspector, traveled to the mine to start the investigation. Kevin Hirsch, assistant district manager, assigned Rexdon Boliard, mine safety and health inspector, as the lead investigator.

At 9:07 a.m., Lands and Combs arrived at the mine. At 9:09 a.m., Combs issued an order under the provisions of Section 103(k) of the Mine Act to ensure the safety of the miners and the preservation of evidence. At 11:00 a.m., Boliard arrived at the mine and met with the accident investigation team. The MSHA accident investigation team conducted an examination of the accident scene, interviewed miners and mine management, and reviewed conditions and work procedures relevant to the accident. See Appendix A for a list of persons who participated in the investigation.

DISCUSSION

Location of the Accident

The accident occurred on the road on the pit ramp used by mining equipment to travel in and out of the active mining pit. The pit ramp is constructed of rock and is an inclined road with a curve towards the bottom. See Appendix B for an aerial photo of the road and pit ramp. Investigators determined the road was in good condition, the height of the berms met MSHA's mid-axle height requirement. However, investigators determined the berms were overall inadequate because they were not capable of moderating or limiting the force of the haul truck with regard to traveling over the bank of the roadway. Investigators determined inadequate berms contributed to the accident.

The curve in the pit ramp did not exceed the haul truck's maximum turning radius of 45 degrees, which allowed the truck to navigate the turn without difficulty. The truck traveled approximately 350 feet down the pit ramp before it drove over the berm on the left side of the road and landed on its top in the water 39 feet below.

The mine operator had a mine-wide speed limit posted. However, the mine operator did not post any signs to mark the steep grade of the pit ramp or a speed limit reduction for this location. The grade measured between 8 and 14 degrees, with an average of 10 to 11 degrees. Investigators determined that the haul truck was traveling too fast for the road conditions on the pit ramp and that the lack of signage contributed to the accident.

Weather

The weather at the time of the accident was approximately 60 degrees Fahrenheit and mostly sunny. There was no precipitation at the time of the accident. Investigators determined that the weather did not contribute to the accident.

Equipment Involved

The truck involved in the accident was a Volvo A40D Articulating Haul Truck. The mine acquired the pre-owned haul truck approximately one year ago. This truck has six forward gears in both high and low ranges. Before delivery of the haul truck from the place of purchase, it was

locked out of high range, limiting the operation to the six gears in the low range. When the haul truck was recovered, the braking system was tested by a Volvo-certified mechanic. No defects were found with the braking system of the truck. The haul truck was equipped with a lap style seat belt. When examined, the seat belt functioned properly. Investigators determined that the condition of the haul truck did not contribute to the accident.

Examinations

Ellis conducted a workplace examination of the pit, including the pit road, on the day of the accident, and recorded no hazards. Investigators were not able to obtain legible pre-operational examination records of the haul truck for the day of the accident. Previous pre-operational records were available with only a fuel leak being listed. Investigators determined these examinations were adequate and did not contribute to the accident.

Training and Experience

Amberger had over six years of mining experience. Amberger worked approximately two months at the Colt Rock and Lime, LLC - Scott City mine and operated a haul truck on the pit road during this time. Amberger received his new miner training for the Colt Rock and Lime, LLC - Scott City mine on June 25, 2025, and received task training on the Volvo Haul Truck on June 26, 2025. Amberger had been trained to wear a seat belt in accordance with the mine operator's written seat belt policy. Investigators determined that training did not contribute to the accident.

Written Safety Program

Colt Rock and Lime, LLC – Scott City developed and implemented a written safety program to identify and analyze hazards and the resulting risks related to the movement and the operation of surface mobile equipment, and properly trained miners on the program. When reviewed, investigators determined that the written safety program was adequate and did not contribute to the accident.

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 ensure that operators of self-propelled mobile equipment maintained control of the equipment while it is in motion.

Corrective Action: The mine operator held training on maintaining control of mobile equipment along with updating company policy.

2. Root Cause: The mine operator did not ensure that seat belts were being worn in haulage trucks.

Corrective Action: The mine operator held training on the use of seat belts along with updating company policy.

3. Root Cause: The mine operator did not provide signs warning of hazardous conditions on the pit ramp.

Corrective Action: The mine operator installed signs for reduced speed, steepness, and curve in haul road.

4. Root Cause: The mine operator did not construct a berm along an elevated roadway capable of moderating or limiting the force of the haul truck with regard to traveling over the bank of the roadway.

Corrective Action: The mine operator has reshaped the berms of the pit ramp roadway to have a steeper berm.

CONCLUSION

On August 25, 2025, at 7:20 a.m., Ethan Amberger, a 26-year-old haul truck operator with over 6 years of mining experience, died when the haul truck he was operating drove over berm on the pit ramp, fell 39 feet, and landed with its cab submerged in water.

The accident occurred because the mine operator did not: 1) ensure that operators of self-propelled mobile equipment maintain control of the equipment while it was motion, 2) ensure that seat belts were worn in haul trucks, 3) provide signs warning of hazardous conditions on the pit ramp, and 4) construct a berm along an elevated roadway capable of moderating or limiting the force of the haul truck with regard to traveling over the bank of the roadway.

Approved By:

Mary Jo Bishop
Acting District Manager

Date

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Colt Rock and Lime, LLC

A fatal accident occurred at this operation on August 25, 2025, at 7:20 am CST. 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 mine operator is reminded of the obligation to preserve evidence that would aid in the investigation of the cause or causes of the accident in accordance with 30 CFR 50.12.

2. A 104(a) S&S citation was issued to Colt Rock and Lime, LLC for a violation of 56.9101

On August 25, 2025, a fatal accident occurred at this mine when the operator of a haul truck lost control of their truck. The operating speed of the truck was not consistent with the condition of the roadway and grade. While descending the pit ramp, the truck drove over a berm on the left side of the road, fell 39 feet, and landed with its cab submerged in water, fatally injuring the haul truck operator.

3. A 104(a) S&S citation was issued to Colt Rock and Lime, LLC for a violation of 56.14131(a)

On August 25, 2025, a fatal accident occurred at this mine when the operator of a haul truck lost control of their truck. The haul truck operator was not wearing a seat belt at the time of the accident. While descending the pit ramp, the truck drove over a berm on the left side of the road, fell 39 feet, and landed with its cab submerged in water.

4. A 104(a) S&S citation was issued to Colt Rock and Lime, LLC for a violation of 56.9100(b)

On August 25, 2025, a fatal accident occurred at this mine when the operator of a haul truck lost control of their truck. The mine operator did not install signage at the entrance to the Pit Ramp warning miners of the steep grade, sharp curve, and reduced speed limit. While descending the pit ramp, the truck drove over a berm on the left side of the road, fell 39 feet, and landed with its cab submerged in water.

5. A 104(a) S&S citation was issued to Colt Rock and Lime, LLC for a violation of 56.9300(a)

On August 25, 2025, a fatal accident occurred at this mine when the operator of a haul truck lost control of their truck. The mine operator did not construct a berm capable of moderating or limiting the force of the haul truck with regard to traveling over the bank of the roadway. While descending the pit ramp, the truck drove over a berm on the left side of the road, fell 39 feet, and landed with its cab submerged in water.

APPENDIX A – Persons Participating in the Investigation

Colt Rock and Lime, LLC

Cade Smith	Owner
Paige Smith	Safety Director
Timothy Ellis	Foreman
Oriana Brackett	Haul Truck Driver
Kendall Davis	Plant Operator
Case Seabaugh	Loader Operator
Justin Collins	Plant Maintenance

Mine Safety and Health Administration

Nicholas Lands	Supervisory Mine Safety and Health Inspector
Rexdon Boliard	Mine Safety and Health Inspector
Douglas Combs	Mine Safety and Health Inspector

APPENDIX B – Aerial Photo of the Pit Ramp

