FAI-F016CD5-1

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Crushed, Broken Basalt)

Powered Haulage Accident Fatality Report
August 7, 2025

Falcon Drilling and Blasting Inc (XSM)
Eureka, WI

at

202501
Highpoint Sand and Gravel LLC
Rockland, Ontonagon County, Michigan
ID No. 47-03973

Accident Investigators

Elwood Burriss
District Staff Assistant

Roscoe Clarke
Mine Safety and Health Inspector

Cory Niemi
Supervisory Mine Health Specialist

Originating Office
Mine Safety and Health Administration
Duluth District
515 W 1st Street, Room 323
Duluth, Minnesota 55802
Kevin Ouke, Acting District Manager

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OVERVIEW

On August 7, 2025, at approximately 2:15 p.m., Terry Johnson, a 50-year-old contract blaster foreman with 33 years of mining experience, died after the front-end loader he was operating traveled over the edge of a highwall, falling approximately 50 feet.

The accident occurred because the mine operator and contractor did not: 1) ensure the equipment operator maintained control of the front-end loader while it was in motion, 2) maintain the front-end loader braking system in safe operating condition, 3) update and implement their written Safety Program for Surface Mobile Equipment adequately, and 4) task train the miner to operate and perform a pre-operation inspection of the front-end loader.

GENERAL INFORMATION

Highpoint Sand and Gravel LLC owns and operates the 202501 mine. The mine is a new portable surface mine which produces crushed, broken basalt. It is in a former mine pit location called the Rockland Quarry in Ontonagon County, Michigan and contains stockpiles from the previous property owner. Highpoint Sand and Gravel LLC contracted the initial drill and blast operations to Falcon Drilling and Blasting Inc. The mine operator intended to bring a portable crushing plant to the mine pit location after completion of the initial blast. A front-end loader onsite was used to load the existing material stockpiles into over-the-road trucks, which transported the material from the mine site.

The principal management official at the 202501 mine at the time of the accident was:

Nick Trapp Owner

The principal management official for Falcon Drilling and Blasting Inc. at the time of the accident was:

Tony Tritt President

The Mine Safety and Health Administration (MSHA) had not conducted a regular safety and health inspection at this new mine. Highpoint Sand and Gravel LLC submitted a Mine Operator Identification Request form to MSHA on April 17, 2025, and MSHA issued a new Mine Identification Number on May 9, 2025. Highpoint Sand and Gravel LLC did not notify MSHA that mining activities had commenced at the 202501 mine.

DESCRIPTION OF THE ACCIDENT

On August 7, 2025, at approximately 5:00 a.m., Terry Johnson met Daniel Fye, blasting helper, and the two traveled together to the Rockland Quarry location in Rockland, Michigan. Johnson and Fye arrived at 9:30 a.m. and obtained drill records from Robert Pulse, driller, as he parked the drill at the northeast corner of the mine and left the site. Johnson and Fye drove up the road to the blast site and prepared the shot for loading. Johnson then used the John Deere 544E front-end loader to stage stemming material near the blast pattern.

At approximately 10:30 a.m., Clint Breitzman and Trent Zabel, contract blasters from Quick Supply Co., arrived at the Rockland Quarry location. Quick Supply Co. was subcontracted to provide “tailgate service” where the company delivers the explosive materials and assists in loading the blast holes.

At approximately 12:00 p.m., Nick Trapp, owner of Highpoint Sand and Gravel LLC, arrived at the Rockland Quarry location to observe the blast, accompanied by his cousin, Drew Trapp. The blast pattern was loaded, primed and stemmed with three-quarter clear stone from the Rockland Quarry location. The blast area was secured for the blast and detonation occurred at approximately 2:00 p.m.

Johnson and Fye drove up the road to assess the blast site in the blasting pickup. A post-blast examination was conducted and Johnson released the blast area from restrictions. The Quick Supply Co. contract blasters then departed the mine site.

Johnson retrieved the John Deere 544E front-end loader, scooped a bucket of material and drove the front-end loader to the blast site. At the blast site, Johnson turned the front-end loader off to communicate his intention to build a berm to Fye. Fye was standing on the ground to the left side of the front-end loader approximately 12 feet behind it. The loader, with the engine still off, began to roll toward the highwall edge with the bucket full of material. Johnson attempted to stop the loader, without success. As it increased speed, he tried to evacuate the cab as it went

over the edge of the highwall. Johnson and the front-end loader both went over the highwall and fell approximately 50 feet into the blasted material below at approximately 2:15 p.m.

N. Trapp and D. Trapp were driving on the pit floor to observe the freshly blasted material before leaving and they observed the John Deere 544E fall from the highwall. They drove to the area, climbed the material, and began cardiopulmonary resuscitation (CPR). Fye got in the blasting pickup and traveled from the highwall area down to the edge of the blasted material. N. Trapp called 911 at 2:18 p.m. while rotating the task of administering CPR to Johnson with D. Trapp and Fye.

At 2:34 p.m., the Ontonagon County Sheriff's Department arrived. Deputy Sheriff John Hasenberg placed an automated external defibrillator (AED) on Johnson. At 2:44 p.m., SONCO Ambulance (EMS) performed a medical assessment and reported it to Medical Control at Aspirus Ironwood. Dr. Eric Toth, D.O. remotely pronounced Johnson dead at 2:57 p.m.

INVESTIGATION OF THE ACCIDENT

On August 7, 2025, at 2:52 p.m., David Anderson, safety specialist/trainer for Falcon Drilling and Blasting Inc., called the Marquette, Michigan, MSHA Field Office and spoke with Nicholas Hurkmans, field office supervisor. Hurkmans contacted Daniel Goyen, acting district manager. Goyen sent Cory Niemi, supervisory health specialist, and Roscoe Clarke, mine safety and health inspector, to the mine. Goyen designated Niemi as the lead investigator.

On August 7, 2025, at 7:15 p.m., Clarke arrived at the mine and 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. Clarke met with and took initial statements from Tony Tritt, president of Falcon Drilling & Blasting, Inc., Fye, N. Trapp, and John Hasenberg, deputy sheriff of Ontonagon County. Niemi arrived at 9:05 p.m.

The MSHA accident investigation team conducted an examination of the accident scene, interviewed mine management and contractors, and reviewed conditions and work procedures relevant to the accident. MSHA Technical Support tested both brake system accumulators from November 20 to December 19, 2025. See Appendix A for a list of persons who participated in the investigation.

DISCUSSION

Location of the Accident

The accident occurred on the north side of this mine at the end of the highwall access road (Appendices B and C). The front-end loader was at the crest of the 50- to 60-foot highwall bench on an approximate 3% grade with a bucket of overburden to be used to construct a berm.

Weather

The weather at the time of the accident was 80º F and sunny with 6-mile-per-hour winds. Investigators determined that the weather did not contribute to the accident.

Equipment Involved

The equipment involved in the accident was a 1990 John Deere 544E front-end loader. This front-end loader was onsite to load out material. It was owned by a local contractor. The investigation team did not find any evidence indicating miners knew the front-end loader's braking system was defective. The mine operator did not have an operator's manual from the manufacturer. Both the mine operator's and the contractor's safety program for surface mobile equipment state that the training for operation and use of mine equipment would be administered using the manufacturer's operator's manual. The mine operator's and contractor's safety program for surface mobile equipment did not include provisions to identify or analyze hazards related to the movement and operation of the front-end loader. Investigators determined that this contributed to the accident.

Functional testing of the front-end loader was not feasible. The front-end loader was found with the parking brake engaged, but investigators were unable to determine if the parking brake was set before the front-end loader initially rolled. The functionality of the parking brake was not tested due to damage from the accident.

The braking system accumulators were examined and tested by MSHA Technical Support to determine if the accumulators were properly maintained as part of the braking system. MSHA Technical Support worked with John Deere to remove both brake system accumulators after establishing they had zero nitrogen pre-charge pressure. MSHA Technical Support then performed a series of tests to determine if the accumulators had a nitrogen pre-charge leak.

MSHA Technical Support results suggested the original lack of nitrogen pre-charge resulted from a slow leak over an extended period. The accumulators did not exhibit signs of a catastrophic failure or damage that caused this pressure loss. Once recharged, both accumulators functioned as designed.

A brake accumulator stores pressurized hydraulic fluid for quick release, acting as a backup pressure source for braking when the engine is not running, providing power for emergency braking, and supplementing pump output in heavy machinery. Investigators determined the braking system accumulators had no nitrogen pre-charge pressure, meaning the hydraulic brakes could not be fully engaged when the front-end loader was not running. When tested, the right and left service brake accumulators had zero nitrogen pre-charge pressure to assist in braking force to halt the front-end loader. Investigators determined that this contributed to the accident. The operator's manual from the manufacturer has a test procedure (the Brake Accumulator Pre-charge check) that would have revealed this malfunction in the brake system accumulators. Investigators determined through interviews this test procedure was not performed.

Mining Method

At the time of the accident, drilling and blasting were the only mining activities that occurred at the Rockland Quarry location. Highpoint Sand & Gravel, LLC contracted drilling and blasting to Falcon Drilling and Blasting Inc. Falcon Drilling and Blasting Inc. started drilling the 10 by 13-foot pattern of 35 4.5-inch diameter drill holes on July 31, 2025, and completed the drilling the morning of the blast. Quick Supply Co. was subcontracted at the Rockland Quarry to deliver the

blasting materials and assist in loading the blast holes. Investigators determined the method of mining did not contribute to the accident.

Examinations

Investigators could not determine if a pre-operational inspection of the front-end loader on the day of the accident was completed as there was nothing recorded by Johnson. The front-end loader was on-site for material load out purposes. Previously, the loader had been used at least three times by Highpoint personnel with pre-operational inspections completed and recorded.

Johnson conducted a workplace examination of the blasting area after coming on site on the day of the accident and did not identify any hazards. Investigators determined the workplace examination was adequate and did not contribute to the accident.

Training and Experience

Johnson had 33 years of mining experience as a blaster, seven weeks with Falcon Drilling and Blasting Inc. and one week at this mine. Johnson did not receive site-specific hazard awareness training or task training on the front-end loader. Annual refresher training was conducted on January 15, 2025, by his former employer and Johnson received newly hired experienced miner training from Falcon Drilling and Blasting on June 20, 2026. Investigators determined that a lack of task training contributed 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 and contractor implemented the corresponding corrective actions to prevent a recurrence.

1. Root Cause: The contractor did not maintain control of the John Deere 544E front-end loader while it was in motion.

   Corrective Action: The contractor developed a written procedure which requires contractors to use the contractor's equipment and not the mine operator's equipment. Contractor employees have been trained in the written procedure.

2. Root Cause: The mine operator did not maintain the John Deere 544E front-end loader braking system in safe operating condition.

   Corrective Action: The front-end loader involved in the accident was permanently removed from service. The mine operator developed written procedures for brake examinations and testing for mobile equipment based on manufacturer recommendations. Miners have been trained in the written procedure.

3. Root Cause: The mine operator and contractor did not develop and implement provisions for safe operations and maintenance of the John Deere 544E front-end loader and update them in the existing safety programs for surface mobile equipment.

Corrective Action: The contractor and mine operator updated their existing safety programs for surface mobile equipment with proper training materials. Contractors and miners were trained in the updated safety programs.

4. Root Cause: The contractor and mine operator did not provide task training on the John Deere 544E front-end loader.

   Corrective Action: The contractor and mine operator revised and developed task training plans and ensured contractors and miners were task trained on all equipment.

CONCLUSION

On August 7, 2025, at approximately 2:15 p.m., Terry Johnson, a 50-year-old contract blaster foreman with 33 years of mining experience, died after the front-end loader he was operating traveled over the edge of a highwall, falling approximately 50 feet.

The accident occurred because the mine operator and contractor did not: 1) ensure equipment operators maintained control of the front-end loader while it was in motion, 2) maintain the front-end loader braking system in safe operating condition, 3) update and implement their written Safety Program for Surface Mobile Equipment adequately, and 4) task train the miner to operate and perform a pre-operation inspection of the front-end loader.

Approved By:

_____ _____

Kevin Ouke Date
Acting District Manager

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Highpoint Sand and Gravel LLC.

   A fatal accident occurred on August 7, 2025, at approximately 2:15 p.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 the contractor, Falcon Drilling, for a violation of 30 CFR 56.9101.

   On August 7, 2025, a fatal accident occurred when a contract blaster foreman operating a John Deere 544E front-end loader to build berms along the highwall of a fresh blast was unable to stop and travelled over the edge of the highwall. The contract blaster foreman could not maintain control of the front-end loader after stopping with the engine off on an approximately three percent grade with a bucket of berm material.

3. A 104(a) citation was issued to Highpoint Sand and Gravel LLC for a violation of 30 CFR 56.14101(a)(3).

   On August 7, 2025, a fatal accident occurred when a contract blaster foreman operating a John Deere 544E front-end loader was unable to stop and travelled over the edge of the highwall. The service brake system was not maintained in functional condition. When tested, the right and left service brake accumulators had zero pressure to assist in braking force to halt the front-end loader.

4. A 104(a) citation was issued to Highpoint Sand and Gravel LLC for a violation of 30 CFR 56.23003(a)(1).

   On August 7, 2025, a fatal accident occurred when a contract blaster foreman operating a John Deere 544E front-end loader to build berms along the highwall of a fresh blast was unable to stop and travelled over the edge of the highwall. The mine operator’s safety program for surface mobile equipment did not include provisions to identify or analyze hazards related to the movement and operation of the John Deere 544E front-end loader.

5. A 104(a) citation was issued to the contractor, Falcon Drilling, for a violation of 30 CFR 56.23003(a)(1).

   On August 7, 2025, a fatal accident occurred when a contract blaster foreman operating a John Deere 544E front-end loader to build berms along the highwall of a fresh blast was unable to stop and travelled over the edge of the highwall. The independent contractor’s safety program for surface mobile equipment did not include provisions to identify or

analyze hazards related to the movement and operation of the John Deere 544E front-end loader.

6. A 104(a) citation was issued to Highpoint Sand and Gravel LLC for a violation of 30 CFR 46.7(a).

   On August 7, 2025, a fatal accident occurred when a contract blaster foreman operating a John Deere 544E front-end loader to build berms along the highwall of a fresh blast was unable to stop and travelled over the edge of the highwall. The mine operator did not provide new task training prior to the contract blaster foreman operating the front-end loader.

7. A 104(a) citation was issued to the contractor, Falcon Drilling, for a violation of 30 CFR 46.7(a).

   On August 7, 2025, a fatal accident occurred when a contract blaster foreman operating a John Deere 544E front-end loader to build berms along the highwall of a fresh blast was unable to stop and travelled over the edge of the highwall. The independent contractor did not ensure new task training was given prior to the contract blaster foreman operating the front-end loader.

APPENDIX A – Persons Participating in the Investigation

Highpoint Sand and Gravel LLC

Nick Trapp	Owner

Falcon Drilling and Blasting Inc (XSM)

Dylan Tritt	Operation Supervisor
Tony Tritt	President
Daniel Fye	Blasting Helper

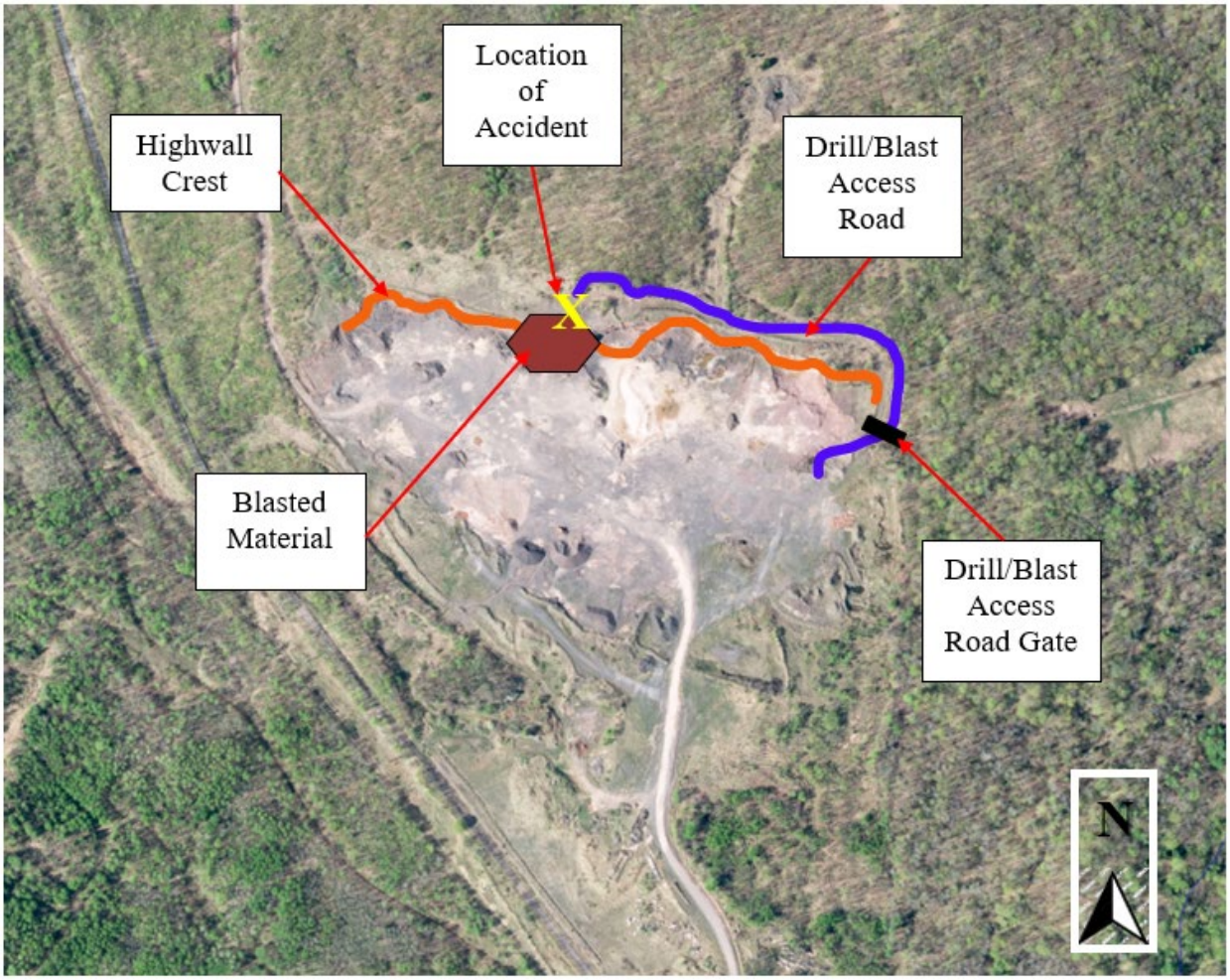
Ontonagon County Sherif's Department

John Hasenberg	Deputy Sherif

Mine Safety and Health Administration

Daniel Goyen	Acting District Manager
Elwood Burriss	District Staff Assistant
Cory Niemi	Supervisory Health Specialist
Roscoe Clarke	Mine Safety and Health Inspector
Davin Sweeney	Mechanical Engineer, Technical Support

APPENDIX B – Aerial View of Rockland Quarry



APPENDIX C – Highwall and Blasted Material