

UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface  
(Industrial Sand)

Fatal Machinery Accident  
December 16, 2022

Stout Excavating Group LLC (B7441)  
Converse, Texas

at

Signal Peak Silica of Atascosa  
SP Silica of Atascosa, LLC  
Poteet, Atascosa County, Texas  
ID No. 41-05317

Accident Investigators

Ramiro Jimenez  
Supervisory Mine Safety and Health Inspector

Armando Moreno  
Mine Safety and Health Inspector

Originating Office  
Mine Safety and Health Administration  
Dallas District  
1100 Commerce Street RM 462  
Dallas, TX 75242  
William O'Dell, District Manager

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## OVERVIEW

On December 16, 2022, at 4:29 p.m., Thomas Hild, a 26 year-old contract mechanic with over a year of mining experience, died while removing the counterweight from a hydraulic excavator. Hild was removing the last bolts from the counterweight while standing on the back step of a service truck when the counterweight fell and struck him.

The accident occurred because the contractor did not: 1) provide task training on disassembling major components on a hydraulic excavator, and 2) block the equipment against hazardous motion.

## GENERAL INFORMATION

SP Silica of Atascosa, LLC owns and operates the Signal Peak Silica of Atascosa mine (Signal Peak). This mine is a surface industrial sand mine located in Poteet, Atascosa County, Texas. The mine employs 82 miners and operates two 12-hour shifts, seven days per week. The mine extracts industrial sand from the pit with hydraulic excavators. The hydraulic excavators load haul trucks that transport the industrial sand to a processing plant. The mine operator sells the finished product to the oil and gas industry. The mine operator contracted Stout Excavating Group LLC (Stout) to provide excavating and hauling services. Hild was employed with Stout.

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

Justin Arndt

Site Manager

The principal management official for Stout at the time of the accident was:

James Gibbons

Maintenance Superintendent

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on August 05, 2022. The 2021 non-fatal days lost incident rate for the Signal Peak mine was 1.99, compared to the national average of 1.36 for mines of this type.

### DESCRIPTION OF THE ACCIDENT

On December 16, 2022, at approximately 6:30 a.m. Hild started his shift. At 7:30 a.m., Hild, Gibbons, and Tyler Kraemer, Mechanic for Stout, were disassembling major components on a hydraulic excavator for transportation to Kermit, Texas. Hild and Kraemer had removed the tracks, upper boom, and bucket earlier that day while Gibbons observed. Hild backed his service truck close to the rear of the hydraulic excavator's counterweight. Hild climbed onto the back step of the service truck to access the bolts that secured the counterweight to the hydraulic excavator.

At 4:29 p.m., Gibbons and Kraemer stood approximately ten feet away while Hild removed the last bolt from the counterweight. Gibbons and Kraemer heard a popping noise, went to Hild's location, and saw the counterweight sitting on the ground. Gibbons and Kraemer saw that Hild was injured, and Gibbons contacted emergency services.

At 4:32 p.m., CJ Zoeller, Deputy Sheriff, and Robert Newman, Sergeant Investigator from the Atascosa County Sheriff's Department, responded to the accident location. At 4:51 p.m., Atascosa County Emergency Medical Services arrived at the accident site. Willie Leal, Jr., Justice of the Peace 3 for Atascosa County, arrived and pronounced Hild dead at 6:18 p.m.

### INVESTIGATION OF THE ACCIDENT

On December 16, 2022, at 4:51 p.m., Steven Apperson, Vice President of Environmental Health and Safety, called the Department of Labor National Contact Center (DOLNCC) to report the accident. At 5:07 p.m., the DOLNCC contacted Brett Barrick, Assistant District Manager. Barrick sent Armando Moreno, Mine Safety and Health Inspector, to the mine. At 7:45 p.m., Moreno 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 preservation of evidence. Barrick assigned Ramiro Jimenez, Supervisory Mine Safety and Health Inspector, as the lead accident investigator.

On December 17, 2022, at 6:30 p.m., Jimenez arrived at the mine 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. See Appendix A for a list of persons who took part in the investigation.

## DISCUSSION

### Location of the Accident

The accident occurred south of the 28-11 stacker belt, west of the run-of-mine stockpile (see Appendix B). The mine operator used this area to stage the hydraulic excavator.

### Equipment Involved

The hydraulic excavator involved in the accident is a Caterpillar 390F Excavator (see Appendix C). Investigators found a copy of the manufacturer's operating manual in the cab of the hydraulic excavator, containing step-by-step instructions to remove the 27,227 lb. counterweight.

Investigators, along with representatives of Holt CAT, an authorized Caterpillar heavy equipment and engine dealer, examined the hydraulic excavator and found that two anchor bolts were missing from the counterweight. These missing bolts are important parts for supporting the counterweight during the assembly and disassembly process. The Caterpillar representatives replaced the anchor bolts and other parts damaged during the accident and were able to disassemble the counterweight without any issues. The Caterpillar representatives found no other defects that contributed to the accident. Investigators determined that Hild did not engage the lift cylinder on the excavator to block the counterweight from hazardous motion prior to removal of the final mounting bolt, which contributed to the accident.

### Weather

The weather at the time of the accident was 66 degrees Fahrenheit with light winds. Investigators determined that weather did not contribute to the accident.

### Training and Experience

Hild had over one year of experience working as a mechanic for Stout. On March 24, 2022, Hild participated in the assembly of the counterweight on the hydraulic excavator but had a limited role. During interviews, Donald Erskine and Javier Garcia, Mechanics for Stout, stated that Hild was an observer as they assembled the counterweight and other components upon the excavator's arrival to the mine site. On the day of the accident, Erskine and Garcia called Hild and Kraemer and said to wait for them (Erskine and Garcia) to remove the counterweight knowing that Hild would need assistance due of his lack of experience with the disassembly process. Erskine and Garcia stated they were concerned because they knew Hild had never done the task. During interviews Gibbons stated that Hild was familiar with the disassembly procedure for the hydraulic excavator. However, Gibbons would not confirm that Hild had removed the counterweight from the excavator.

During interviews, Shane Sabin, Operations Manager for Stout, and Ascension Mosqueda, Safety Manager for Stout, stated that no task training is given to their mechanics and that they rely on them to look at the manufacturer's operating manuals for their training. Sabin and Mosqueda also stated they did not have any procedure or documentation to ensure that the mechanics looked at the manuals. None of Stout's management acknowledged assigning this task to Hild. Investigators determined that lack of task training contributed to the accident and

Stout was aware of 30 CFR task training requirements.

#### Examinations

The mine operator did not conduct a workplace examination before beginning the disassembly procedure for the hydraulic excavator. Investigators determined that a workplace examination would not have identified the two missing anchor bolts on the counterweight, and a lack of this examination 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 contractor implemented the corresponding corrective actions to prevent a recurrence.

1. Root Cause: The contractor did not provide task training on disassembling major components on a hydraulic excavator.

Corrective Action: The contractor will train all employees according to the training plan.

2. Root Cause: The contractor did not ensure that the equipment was blocked against hazardous motion.

Corrective Action: The contractor has held safety meetings with all miners to retrain them on their existing procedures and requirements regarding blocking equipment against hazardous motion.

### CONCLUSION

On December 16, 2022, at 4:29 p.m., Thomas Hild, a 26 year-old contract mechanic with over a year of mining experience, died while removing the counterweight from a hydraulic excavator. Hild was removing the last bolts from the counterweight while standing on the back step of a service truck when the counterweight fell and struck him.

The accident occurred because the contractor did not: 1) provide task training on disassembling major components on a hydraulic excavator, 2) block the equipment against hazardous motion.

Approved By:

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William O'Dell  
District Manager

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Date

## ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Stout Excavating Group LLC.

An accident occurred on December 16, 2022, at 4:29 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(d)(1) citation was issued to Stout Excavating Group LLC for a violation of 30 CFR 46.7(a).

A fatal accident occurred on December 16, 2022, when a contract mechanic was struck by a counterweight while removing it from a Caterpillar 390F Excavator. The contract mechanic removed all the mounting bolts from the counterweight, causing it to fall off of the back of the hydraulic excavator. The contractor did not provide task training to the contract mechanic, and the contract mechanic did not have any previous experience in this task. The Federal Mine Safety and Health Act of 1977 states that an untrained miner is a hazard to himself and to others. The contractor engaged in aggravated conduct constituting more than ordinary negligence by not providing the miner with task training. This is an unwarrantable failure to comply with a mandatory standard.

3. A 104(d)(1) order was issued to Stout Excavating Group LLC for a violation of 30 CFR 56.14105.

A fatal accident occurred on December 16, 2022, when a contract mechanic was struck by a counterweight while removing it from a Caterpillar 390F Excavator. The contract mechanic removed all the mounting bolts from the counterweight, causing it to fall off of the back of the hydraulic excavator. The contract mechanic did not engage the lift cylinder on the excavator to block the counterweight from hazardous motion prior to removing the final mounting bolts. The contractor did not ensure that the counterweight was blocked from hazardous motion prior to the contract mechanic removing of all the mounting bolts. The contractor engaged in aggravated conduct constituting more than ordinary negligence by not ensuring that persons were protected from hazardous motion during the maintenance work being performed on the excavator. This is an unwarrantable failure to comply with a mandatory standard.

## APPENDIX A – Persons Participating in the Investigation

### SP Silica of Atascosa, LLC

Steven Apperson	Vice President of Environmental, Health and Safety
Justin Arndt	Site Manager
Daniel Sandoval	Environmental Permitting Coordinator
Jason Woodford	Safety Specialist
Joseph Pena	Dayshift Loadout Supervisor
Alfredo De Los Santos	Miner

### Stout Excavating Group, LLC

Shane Sabin	Operations Manager
Amanda Sabin	Office Manager
Cullen Wallace	Legal Counsel
Jerry Don Anderson	Maintenance Director
Brian Burke	Mine Superintendent
James Gibbons	Maintenance Superintendent
Ascension Mosqueda	Safety Manager
Dave Taft	Fleet Manager
Shawn Keller	Foreman
Robert Hvamsted	Assistant Foreman
Donald Erskine	Mechanic
Javier Garcia	Mechanic
Tyler Kraemer	Mechanic

### Holt CAT

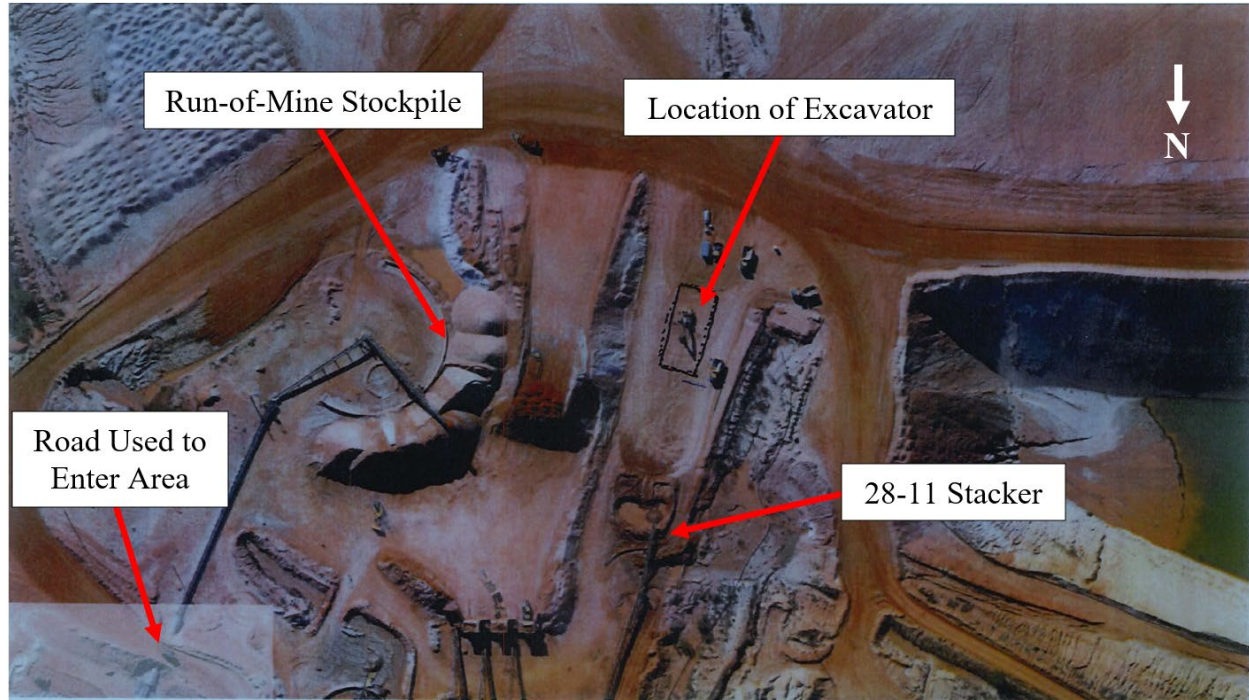
Scott Baker	Technician
Chris Schhomer	Technician
Daniel Williams	Technician

### Mine Safety and Health Administration

Ramiro Jimenez	Supervisory Mine Safety and Health Inspector
Armando Moreno	Mine Safety and Health Inspector



## APPENDIX B – Aerial View of the Accident Scene



APPENDIX C – Photograph of the Equipment

