FAI-6281414-1

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Construction Sand and Gravel)

Fatal Machinery Accident
August 4, 2022

Wooten Sand & Gravel, Inc.
Wooten Sand & Gravel, Inc.
Fouke, Miller County, Arkansas
ID No. 03-01975

Accident Investigators

Wesley Hackworth
Supervisory Mine Safety and Health Inspector

Allen Livingston
Mine Safety and Health Inspector

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

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OVERVIEW

On August 4, 2022, at approximately 3:45 p.m., Jimmy Wooten Sr., a 67 year-old mine owner with over 14 years of mining experience, died when he was struck by a bulldozer while performing maintenance at the mine's maintenance shop.

The accident occurred because the mine operator did not block the bulldozer against hazardous motion before performing maintenance.

GENERAL INFORMATION

Wooten Sand & Gravel, Inc. owns and operates the Wooten Sand & Gravel, Inc. (Wooten) mine. This is a surface construction sand and gravel mine located near Fouke, Miller County, Arkansas. Wooten mine employs 12 miners and operates one ten-hour shift, five days per week. The mine excavates sand and gravel in an open pit. The material is used in the construction industry.

The principal management officials at Wooten mine at the time of the accident were:

Jimmy Wooten Sr.	President
Jimmy Wooten Jr	Vice President

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on May 17, 2022. The 2021 non-fatal days lost injury incident rate for Wooten mine was zero compared to the national average of 2.98 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On August 4, 2022, at 5:31 a.m., Wooten Sr. arrived at the mine office. From that time until approximately 3:25 p.m., Wooten Sr. worked on several projects at the mine. According to interviews, at approximately 3:25 p.m., Casey Davis, Truck Driver, was operating his haul truck when he saw Wooten Sr. near the maintenance shop walking around the bulldozer. The bulldozer was outside of the maintenance shop with its front blade resting on a steel pipe inside the maintenance shop bay. At approximately 3:40 p.m., Wooten Jr. was driving a front-end loader toward the Mason Sand stockpile when he noticed the bulldozer had moved farther outside of the maintenance shop with the engine side covers reinstalled. At approximately 3:45 p.m., Davis drove his haul truck to the maintenance shop to ask Wooten Sr. about getting transmission fluid for his haul truck. According to his interview, Davis approached the maintenance shop area and saw Wooten Sr. lying on the ground. Evidence indicates that the bulldozer traveled in reverse, ran over Wooten Sr., and came to a stop against a steel chute that was laying on the ground.

Davis got out of his truck and ran to Wooten Sr. Davis checked Wooten Sr. for a pulse but did not detect one. Davis used his cell phone to call Wooten Jr. to tell him that Wooten Sr. was hurt. Davis checked Wooten Sr. for a pulse again, but did not detect one. Wooten Jr.; Brian Alexander, Excavator Operator; Michael Alexander, Cullen Alexander, and Colin Cowart, Truck Drivers, arrived at the scene. C. Alexander went to the office and notified Lacy Peavy, Office Manager, of Wooten Sr.'s condition. Peavy called 911 at 3:55 p.m. Wooten Jr. instructed M. Alexander to turn off the bulldozer. At approximately 4:30 p.m., Miller County Sheriff's Department and Emergency Medical Services arrived at the accident scene. Dakota Bloyd, Miller County Coroner, arrived and pronounced Wooten Sr. deceased at 5:15 p.m.

INVESTIGATION OF THE ACCIDENT

On August 4, 2022, at 4:06 p.m., Peavy called the Department of Labor National Contact Center (DOLNCC). The DOLNCC called Ronnie Free, Supervisory Mine Safety and Health Specialist. Free called Brett Barrick, Assistant District Manager, who called Dwight Shields, Supervisory Mine Safety and Health Inspector. Shields sent Allen Livingston, Mine Safety and Health Inspector, to the mine. Barrick then called Wesley Hackworth, Supervisory Mine Safety and Health Inspector, and assigned him as the lead investigator. At 6:00 p.m., Livingston 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. Livingston took photos, measurements, and initial statements from miners.

On August 5, 2022, Hackworth and Livingston 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 participated in the investigation.

DISCUSSION

Location of the Accident

The accident occurred outside the south side of the maintenance shop (see Appendix B). The bulldozer was moved into the maintenance shop bay area on August 2, 2022, to perform preventative maintenance. Prior to the accident, the bulldozer was parked on a concrete slab at the side bay door with the bulldozer's blade resting on a steel pipe inside the maintenance shop bay.

Equipment Involved

The bulldozer involved in the accident is a 2018 Komatsu Model D65PX-18, purchased by the mine operator on August 19, 2020. The bulldozer has joystick controllers on the left and right sides of the operator's cab that can be locked by corresponding control levers. The right joystick controls the blade and the left joystick controls steering and transmission. The control levers lock joystick functions when lowered, and unlock joystick functions when raised. The left control lever also controls the parking brake.

The operation and maintenance manual lists important safety steps in separate sections of the manual. These safety steps, summarized below, are necessary before a bulldozer operator gets out of the seat, leaves the operator's compartment, or before maintenance is performed.

- The bulldozer blade must be lowered to the ground.
- The work equipment lock lever must be in the lock position. This locks the bulldozer blade.
- The park brake lever must be in the lock position.
- The engine must be turned off.
- If maintenance is performed while the engine is running, two workers must be present. One worker must always sit in the operator's seat and be ready to stop the engine at any time. All workers must maintain contact with other workers.
- The tracks must be blocked against motion when inspection and maintenance is performed.

The operation and maintenance manual states that not following the safety procedures in the manual may lead to serious injury or death. Investigators determined that these safety procedures were not followed.

According to interviews and an examination of the scene, when Davis found Wooten Sr., the bulldozer was idling in reverse, the parking brake was not set, and the control lever for the left joystick was raised. The parking brake lever for the left joystick must be raised to access the fuse panel. The fuse panel cover on the front left side of the seat assembly was removed and laying on the floor of the bulldozer (see Appendix C). No fuses were missing and the internal cover that exposes the fuses had not been removed. Evidence indicates Wooten Sr. was positioned on the bulldozer's left track, looking into the fuse panel, when he inadvertently pushed the left joystick back, placing the bulldozer in reverse. The bulldozer movement caused Wooten Sr. to fall on the track, where he was dragged back to the rear of the bulldozer, and run over by the bulldozer.

Wooten Jr. stated that he and Wooten Sr. had performed maintenance on the bulldozer the day prior to the accident. This maintenance was being performed in accordance with the manufacturer's 750-hour preventative maintenance schedule. Wooten Jr. also stated that Wooten Sr. may have changed the fuel filters and reinstalled the engine side covers because they had previously been removed to complete preventative maintenance tasks.

On August 10, 2022, MSHA's accident investigation team, along with Jeffrey Bloodgood, Customer Support Manager for Komatsu, and Charles Grappe, Field Service Technician for Komatsu, conducted examinations and testing of the bulldozer. A diagnostic check of the onboard monitoring system did not show any fault codes that could have contributed to the accident. Grappe performed a field functionality test of the operational controls and safety devices on the bulldozer. When tested, all controls and safety devices functioned properly. Investigators determined that the bulldozer did not have any deficiencies that contributed to the accident.

Diagnostic System Check

Grappe conducted diagnostic checks of the bulldozer monitoring system. Bloodgood pulled up fault codes on the Komatsu ComTrax application. The only fault codes showing up were the previous fault codes. There were no new or additional fault codes in the bulldozer's monitoring system. The previous fault codes were reviewed, and investigators determined these faults did not contribute to the accident.

Operational Field Function Test

Grappe performed a field functionality test of the operational controls and safety devices provided on the bulldozer and determined that the codes did not reveal any information that would have contributed to the accident.

Grappe and the investigators inspected the fuse panel cover (see Appendix C), and determined access to the fuse panel was obstructed when the parking brake lever was partially engaged.

Examinations

Wooten Sr. normally performed the pre-operational inspection of the bulldozer involved in the accident. Investigators found no record of a pre-operational inspection on the day of the accident but also determined there were no defects on the bulldozer. Investigators determined that pre-operational inspections in the past were adequate and did not contribute to the accident. The scheduled 750-hour preventative maintenance does not require removal of the fuse panel. Investigators were unable to determine the reason Wooten Sr. removed the fuse panel cover.

According to interviews, Wooten Sr. would have conducted the workplace examination on the day of the accident. The workplace examination record must be made before the end of the shift. Investigators were unable to find a record of the workplace examination for the area of the accident. Therefore, investigators are unable to determine if Wooten Sr. conducted a workplace examination for the area of the accident.

Training and Experience
Wooten Sr. had over 14 years of mining experience and over 51 years of experience as a bulldozer operator. Investigators reviewed Wooten Sr.'s training records and found he had received annual refresher training on February 1, 2022, and task training on the Komatsu D65 bulldozer on August 24, 2020, 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 cause, and the mine operator implemented the corresponding corrective action to prevent a recurrence.

Root Cause: The mine operator did not block the bulldozer against hazardous motion before performing maintenance.

Corrective Action: The mine operator developed and implemented new written procedures that require all miners to: 1) set the parking brake on mobile equipment when parked and when repairs or maintenance is being performed, and 2) block or use other means to prevent unintended motion of mobile equipment should testing or activation be required to the extent that adjustments or testing cannot be performed without motion or activation.

CONCLUSION

On August 4, 2022, at approximately 3:45 p.m., Jimmy Wooten Sr., a 67 year-old mine owner with over 14 years of mining experience, died when he was struck by a bulldozer while he was performing maintenance at the mine's maintenance shop.

The accident occurred because the mine operator did not block the bulldozer against hazardous motion before performing maintenance.

Approved By:

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William O'Dell Date
District Manager

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Wooten Sand & Gravel, Inc.

   A fatal accident occurred on August 4, 2022, at approximately 3:45 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 Wooten Sand & Gravel, Inc. for a violation of 30 CFR 56.14105.

   A fatal accident occurred at this operation on August 4, 2022, when the mine owner was struck by a Komatsu Model D65PX-18 bulldozer while performing maintenance. The bulldozer unexpectedly moved, causing the mine owner to be run over by the bulldozer. The parking brake was not set, and the bulldozer was idling in reverse when the mine owner was found. The mine operator did not block the bulldozer against hazardous motion before performing maintenance.

APPENDIX A – Persons Participating in the Investigation

Wooten Sand & Gravel, Inc.

Jimmy Wooten Jr.	Vice President
Lacy Peavy	Office Manager
David Wooten	Equipment Operator
Brian Alexander	Excavator Operator
Cullen Alexander	Truck Driver
Michael Alexander	Truck Driver
Colin Cowart	Truck Driver
Casey Davis	Truck Driver

Komatsu

Jeffrey Bloodgood	Customer Support Manager
Charles Grappe	Field Service Technician

Mine Safety and Health Administration

Wesley Hackworth	Supervisory Mine Safety and Health Inspector
Allen Livingston	Mine Safety and Health Inspector
Paul Shelby	Mine Safety and Health Training Specialist

APPENDIX B – Aerial View

APPENDIX C – Left Joystick Control Lever, Fuse Panel, and Fuse Panel Cover