West Virginia Office of Miners' Health, Safety and Training

Report of Fatality Track Haulage Equipment August 5, 2024

ACI Tygart Valley Leer Mine Permit No. U00200406A

Region I Office 14 Commerce Drive, Suite One Westover, WV 26501 Edward Peddicord, Inspector-at-Large

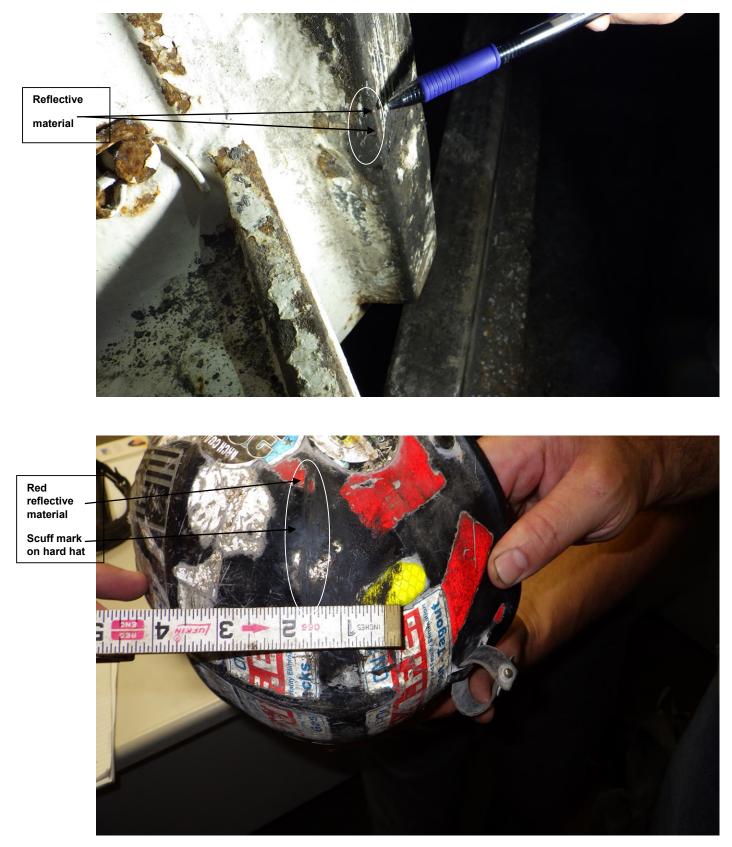
Table of Contents

Photos	1,2,3
CAD Drawing	4
Timeline	5,6
General Information	6
Description	7,8
Findings of Facts	8,9
Conclusion	10
Enforcement Action	10
Acknowledgement	10
Victim Information	11
Mine Information	12

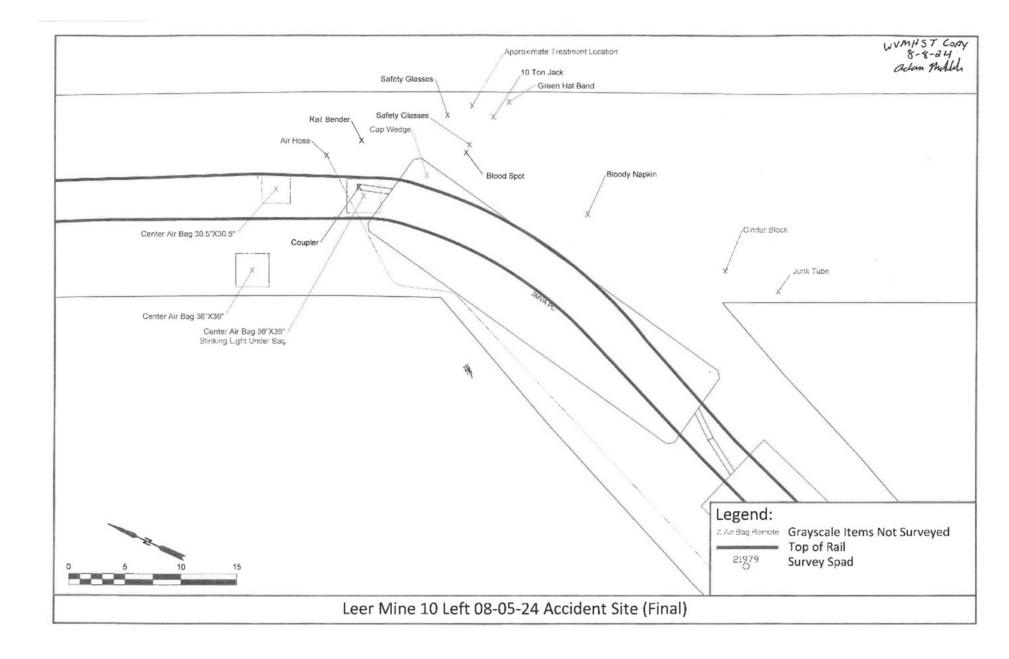


Photos of the Longwall 3MVA Power Car and the accident scene located at 10 Left 16 Block Mule Train Spur



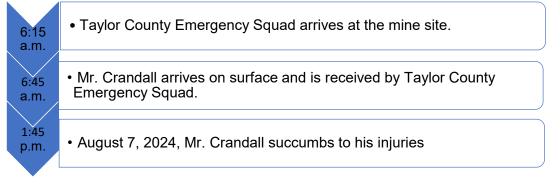


Mr. Crandall's hard hat



7:00	• August 4, 2024, Mr. William J. Crandall and fellow miners prepare for the start
p.m.	of the midnight shift.
7:15 p.m.	• Mr. Crandall and Mr. Robert Grose enter the mine.
7:30 p.m.	• Mr. Crandall and Mr. Grose conduct the preoperational check on the number 11 and number 17 locomotives.
8:00 p.m.	Longwall pump cars enter the mine through the slope portal.
8:30 p.m.	• Mr. Crandall and Mr. Grose leave the slope bottom with longwall pump cars.
10:40 p.m.	Pump cars arrive at 16 block track spur 10 Left section.
11:00 p.m.	• Mr. Crandall and Mr. Grose clear up in the 8 Left track switch with longwall power cars, waiting for midnight shift change to transport power cars.
3:00 a.m.	• August 5, 2024, Longwall 3 MVA power center car derails at 14 block 10 Left track.
3:30 a.m.	• Mr. Gary Bevins leaves longwall setup face to find a ride outside.
4:30 a.m.	• Longwall 3 MVA power center car derailed again at 16 block, track spur 10 left section.
5:45 a.m.	•Time of the accident.
5:50 a.m.	Mr. Michael Rorrer calls dispatcher for help.
5:55 a.m.	•Harrison-Taylor E911 is called for an ambulance.

<u>Timeline</u>



NOTE: All times listed above are approximate

General Information

ACI Tygart Valley, Leer Mine, Permit No. U00200406A, is located near Grafton, Taylor County, West Virginia. The Leer Mine produces 30,000 raw tons per day. Annual production (year-to-date) is 4,087,714 raw tons, from six (6) continuous miner MMU units and one (1) longwall. The coal is transported from the working sections by conveyor belts to the slope belt and then by overland belts to the preparation plant. The Leer Mine employs five-hundred, seventy-two (572) personnel and operates three (3) shifts per day. Daytime and afternoon are coal producing shifts, while maintenance is conducted on the midnight shift. The Lower Kittanning coal seam is accessed by the ACI Tygart Valley, Leer Mine shaft and slope portals. The Leer Mine utilizes diesel and battery track mounted and rubber-tired battery powered haulage equipment.

On August 5, 2024, at approximately 5:45 a.m., William Joseph Crandall, 57 years of age, received injuries while he was located in the 10 Left section track entry, at the 16-block track spur on midnight shift. This track spur is used for switching or storing supply cars and equipment. Mr. Crandall succumbed to his injuries on Wednesday August 7, 2024, at 1:45 p.m. Mr. Crandall was an employee of the Leer Mine.

On August 5, 2024, at 6:00 a.m., Mr. Steven Bishoff, Dispatcher, called 911 for assistance. At this time, the West Virginia Division of Homeland Security Mine and Industrial Accident Rapid Response System was notified of the accident. Mr. Tadd Rankin, Region One Assistant Inspector-at-Large of the West Virginia Office of Miners' Health, Safety & Training, was then notified by Homeland Security that an accident had occurred at the ACI Tygart Valley, Leer Mine. Mr. Rankin notified Mr. Nathan Sharp and Mr. Michael Adam Matlick, District Mine Inspectors, of the accident. Mr. Matlick issued a verbal order at 7:15 a.m., to Mr. Marvin Cochran, Mine Superintendent of Leer Mine. A joint investigation with the Mine Safety and Health Administration, ACI Tygart Valley, Leer Mine and WVOMHS&T began immediately.

Description

The weekend crew's normal shift is from 7:00 p.m. to 7:00 a.m. On August 4, 2024, Mr. Ryan McKinney, weekend Shift Foreman, informed the employees of their assignments. Mr. William Joseph Crandall and Mr. Robert Grose, both classified as Locomotive Operators, were assigned to deliver longwall pump cars and a 3 MVA power center car to the 10 Left section, 16-block track spur. A preoperational check of the locomotives was conducted. Mr. Crandall operated the company #11 locomotive and Mr. Grose operated the company #17 locomotive. Both are track-mounted diesel-powered Brookville locomotives.

Mr. Crandall and Mr. Grose proceeded to the slope bottom where they coupled to the longwall pump cars. They transported the pump cars to 10 Left section, 16-block track spur without incident. They secured the pump cars at the end of the track. They then called for track clearance back to the 8 Left track spur. They cleared the track switch to wait for the shift change. They proceeded to couple to the longwall 3 MVA power center car located at the 8 Left track spur. They received clearance to travel to the 10 Left section, 16-block track spur. While transporting the 3 MVA power center car, it derailed at 14 block 10 Left. After rerailing the 3 MVA power center car and correcting the track condition they proceeded to the 16-block spur. They began to push the 3 MVA power center car into 16-block spur, using the #17 locomotive. Approximately one hundred (100) feet inby the rib line, the 3 MVA power center car derailed at a sharp turn. They then tried to rerail the 3 MVA power center car but were unsuccessful.

Mr. Michael Rorrer, Mine Foreman, Mr. Crandall and Mr. Grose decided to go to the 14 block, 10 Left to retrieve the airbags. Upon returning, they proceeded to position two (2) airbags underneath the 3 MVA power center car and drawbar. They then extended the air hose from the airbags to the #11 Motor located on the 10 Left section track. Due to insufficient length of air hose, the air bag controller was bypassed. When pressurized, the airbags failed to achieve the required height to rerail the 3 MVA power center car. It was decided to release the air pressure and lower the 3 MVA power center car. Mr. Gary Bevins, Battery Repairman and an employee of Production Efficiency Corporation (PEC), retrieved a third airbag located at the mouth of the 16-block spur. It was then added to the two previously installed airbags. The airbags were then repressurized separately, beginning at the bottom bag to the top. The required height was achieved to rerail the 3 MVA power center car.

Mr. Crandall stated that the truck's (wheels) would need turned to align with track rail. A loud noise was heard, and a dust cloud was present. The dust cloud obstructed the view of Mr. Rorrer and Mr. Grose. Upon the dust clearing, Mr. Grose observed that Mr. Rorrer had been injured. Upon examination, he had a laceration above his right eye. Mr. Grose gave paper towels to Mr. Rorrer which he applied to his laceration. Mr. Grose observed Mr. Crandall lying on the mine floor. Upon examining Mr. Crandall, Mr. Grose informed Mr. Rorrer that Mr. Crandall was severely injured. Mr. Rorrer notified Mr. Steven Bishoff, Mine Dispatcher, that a person was injured, and they needed help. Mr. Bishoff then called 911 for an ambulance to be dispatched.

Mr. Rorrer and Mr. Bevins administered first aid to Mr. Crandall. Mr. Grose traveled on #11 locomotive to the 10 Left section to retrieve first aid equipment and additional help. Mr. Hutch Delaney, Midnight Belt Foreman, located at 12 Left drive, heard Mr. Rorrer call for assistance over the radio. Mr. Delaney picked up Mr. David Starling, Mine Examiner and a certified EMT-M.

They proceeded to 10 Left 16-block spur. Upon arrival, they observed several individuals were present. Mr. Crandall had been carried on a six (6) foot mandoor to the 10 Left track entry. Direct pressure was applied with paper towels to control bleeding to the back of Mr. Crandall's head. Mr. Gary Bevins and Mr. Jacob Phillips, Belt Examiner, removed their shirts. One was placed to hold paper towels in place. The other shirt was placed underneath Mr. Crandall's head.

Mr. Crandall was loaded onto Mr. Rorrer's diesel powered Brookville mantrip and transported to Leer Mine shaft bottom. Mr. Justin Baird, Longwall Foreman/EMT-M, Mr. Jacob Phillips and Mr. Derrick Born, Midnight Section Foreman, also traveled on the mantrip. They applied oxygen, secured Mr. Crandall from movement and controlled the bleeding. Mr. Rorrer, who was injured, rode on the outby end of the mantrip operated by Mr. Starling. Mr. Crandall was carried to the bottom of the Leer Mine elevator shaft. Mr. Joseph Cross, Leer Mine Safety Inspector, was on shaft bottom with a first aid gurney.

Mr. Crandall was transported to the surface of the Leer Mine. Upon arriving at the surface, Mr. Crandall was transferred to the care of Taylor County Emergency Squad. Mr. Crandall was then transported by ambulance to United Hospital Center, Bridgeport, West Virginia. Upon arrival at UHC, Mr. Crandall was flown by medical helicopter to Ruby Memorial Hospital where he succumbed to his injuries on Wednesday August 7, 2024, at 1:45 p.m.

Finding of Facts

- 1. Mr. Crandall was an employee of ACI Tygart Valley, Leer Mine for eleven (11) years and two (2) months, with a total mining experience of eleven (11) years and seven (7) months. His classification was Locomotive Operator.
- 2. Mr. Crandall possessed a WVOMHS&T Underground Coal Miner's Certification Number 1-20769, received on 03/06/2013.
- 3. Mr. Crandall received task training for the locomotive on 12/14/2022.
- 4. Mr. Crandall received task training for lifting air bags on 11/05/2013.
- 5. Mr. Crandall worked 3 days a week, Friday, Saturday and Sunday from 7:00 p.m. until 7:00 a.m. These are 12-hour shifts.
- 6. Mr. Crandall received annual retraining on 01/29/2024.
- 7. Mr. Grose possesses a WVOMHS&T Underground Coal Miner's Certification Number 4-12441, received on 11/17/2008.
- Mr. Grose is an employee of ACI Tygart Valley, Leer Mine. He has eleven (11) years, seven (7) months and twenty-six (26) days at this mine, with a total mining experience of sixteen (16) years. His classification is Locomotive Operator.
- 9. Mr. Grose received task training for the locomotive on 12/14/2022.
- 10. Mr. Grose received annual retraining on 01/29/2024.
- 11. Mr. Grose received task training for lifting air bags on 03/16/2024.

- 12. Mr. Rorrer possesses a WVOMHS&T Underground Coal Miner's Certification Number 4-10868, received on 02/09/2005.
- 13. Mr. Rorrer possesses a WVOMHS&T Underground Mine Forman Certification Number 39677-11, received on 02/10/2011.
- 14. Mr. Rorrer possesses a WVOMHS&T EMT-Mining certification EMTM1809, received on 12/13/2016.
- 15. A total of three (3) lifting air bags were being combined.
- 16. One air bag manufactured by SAVA 8 Flat model SFB-K size 36 inches, was placed on the bottom of the set up.
- 17. One air bag manufactured by Hebekissen model SLK, size 36 inches, was placed in the middle of set up.
- 18. One air bag manufactured by SAVA 8 Bar model SLK 45, size 30 inches, was placed on top of set up.
- 19. The following manufacturer's recommendations were not being followed for the SAVA lifting bags:
 - 1. When combining lifting bags, only lifting bags of the same size may be combined.
 - 2. Straps with karabiners through the handles to connect the lifting bags, when combining lifting bags, are required.
 - 3. A controller is to be used to supply, discharge or supervise the filling media of the lifting bags. A controller is a device for supplying, discharging and supervision over the filling media in lifting bags.
- 20. The 3 MVA longwall power center car weighs approximately forty-eight thousand pounds.
- 21. Samples of red reflective material taken from the drawbar/coupler by the Mine Safety Health Administration were submitted to the Technical Support Group located in Triadelphia, West Virginia. Based on several factors, it is believed that the drawbar/coupler struck the right rear of Mr. Crandall's hard hat.

Conclusion

Mr. Crandall was last observed by Mr. Bevins kneeling on the mine floor, looking under the inby walk side corner of the 3 MVA longwall power center car. While attempting to rerail the equipment using an air bag system, the air bag or air bags became dislodged, resulting in the 3 MVA longwall power center car striking Mr. Crandall. Mr. Crandall was severely injured after being struck by the 3 MVA longwall power center car at the 16-block track spur on the 10-Left section. On August 7, 2024, Mr. Crandal succumbed to his injuries at 1:45 p.m.

Enforcement Action

Four (4) violations were issued to ACI Tygart Valley, Leer Mine.

Acknowledgement

The West Virginia Office of Miners' Health, Safety and Training gratefully acknowledges the cooperation of the management and employees of ACI Tygart Valley, Leer Mine and the Mine Safety and Health Administration during this investigation.

Victim Information

Name of Victim William Joseph Crandall Age of Victim 57 years

Total Mining Experience <u>11 yrs, 7 months</u> Experience at This Mine <u>11 yrs, 2 months</u>

Average Number of Days Worked Per Week <u>3 days</u>

Average Number of Hours Worked Per Week 36 hours

Lengths of Shifts at This Mine <u>12 hrs.</u> Travel Time To/From Work <u>28 minutes</u>

Occupation at Time of Accident Locomotive Operator

Regular Occupation Locomotive Operator

Miner's Certification <u>1-20769</u> Other Certifications <u>X</u>

Date of Accident <u>5th</u> Day of <u>August</u>, 2024

At <u>5:45 a.m.</u>

Location of Accident Leer Mine 10 L 16 block spur

Cause of Accident Struck by longwall power car while re-railing longwall power car

Date of death <u>7th</u> Day of <u>August, 2024</u>

Mine Information

Company <u>ACI Tygart Valley</u>	Mine Name <u>Leer Mine</u>	
WV PERMIT <u>U00200406A</u> M	SHA Permit No. <u>46-09192</u>	
Address 1200 Tygart Drive Grafton WV 26354		
County Taylor Phone No. <u>304-265-9700</u>		
Date Permit Issued 09-06-2012		
Working Status Active		
Union Non-Union Yes		
Daily Production <u>30,000 raw tons</u> Annua	al Production YTD: <u>4,087,714 raw tons</u>	
Total Employees <u>572</u> Number of Shift	is <u>3</u>	
Coal Seam and Thickness Lower Kittanning 5 foot		
Accident Incident Rate29 Lo	st Time Accidents <u>1</u>	
Type of Haulage Track, Rubber Tired Equipment and Belt Conveyor System		
WVOMHST Inspectors Nathan Sharp / Chris Ray		
Date of Last Inspection 8/01/2024		
Notified By Joshua Leichliter		
Notification Time <u>5:55 a.m.</u>		
CMSP – Contact Person Joshua Leichliter		