## WEST VIRGINIA OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

# REPORT OF FATALITY BELT CONVEYOR UNDERGROUND COAL MINE

August 25, 2017

PLEASANT HILL MINE
PERMIT #U00104391B

REGION ONE

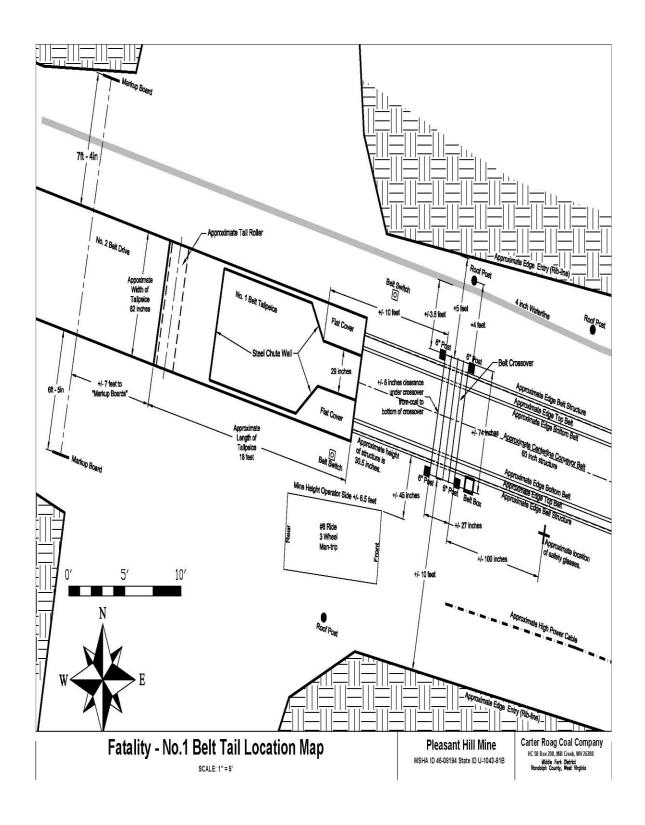
14 COMMERCE DRIVE, SUITE ONE

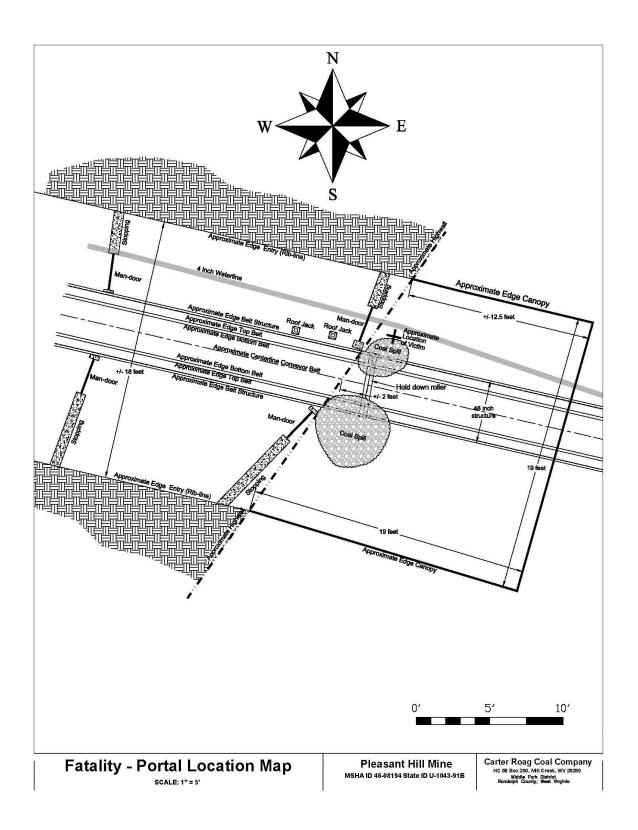
WESTOVER, WEST VIRGINIA 26501

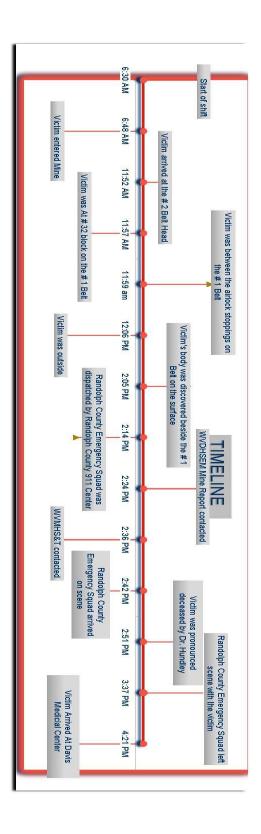
EDWARD PEDDICORD, INSPECTOR-AT-LARGE

# **TABLE OF CONTENTS**

SKETCH	1-2
TIMELINE	3
GENERAL INFORMATION	4
DESCRIPTION	4-6
FINDINGS OF FACT	7-9
CONCLUSION	9
ENFORCEMENT ACTION	9
RECOMMENDATIONS	10
ACKNOWLEDGEMENT	10
VICTIM INFORMATION	11
MINE INFORMATION	12







#### **GENERAL INFORMATION**

The Carter Roag Coal Company, Pleasant Hill Mine, Permit No. U00104391B is a drift and shaft mine, which produces coal in the Sewell A seam, located near County Route 46 Long Run in Randolph County, West Virginia. The underground mine employs 181 miners. The mine produces 414,774 tons of coal annually from two continuous miner units. Coal is transported via conveyor belt to the surface located at the Pleasant Hill portal stockpile. Employees access the mine from the Laurel Run elevator portal, adjacent to the bath house, located on Lanham Cemetery Road. Employees and supplies are transported by rubber tired equipment.

#### **DESCRIPTION**

On August 25, 2017, at 2:24 p.m., the Mine and Industrial Accident Response System was notified by Brad Summerfield, production superintendent, that a fatally injured person was found in a coal pile by a loader operator at the Carter Roag Coal Company, Pleasant Hill Mine in Randolph County. West Virginia State Mine Inspectors; John Scott, Larry Wine, Tadd Rankin and Jeffrey Bennett were instructed by Edward Peddicord, Inspector-at-Large of the West Virginia Office of Miners' Health, Safety & Training, to go directly to the Pleasant Hill Mine. During informal interviews conducted at the mine, it was revealed that the victim was found on the surface by James Yoakum, outside yard man, when he noticed coal spillage on the ground on both sides of the No. 1 conveyor belt hold down roller located where the belt exits the mine. A joint investigation with the Mine Safety and Health Administration, Carter Roag Coal Company and United Coal Company LLC began immediately.

On day shift August 25, 2017, Owen Jones, fireboss, was instructed to work on conveyor belts in Zone 2 and to fireboss Zone 1. Zone 2 conveyor belts extend from the No. 4 conveyor belt drive inby to the No. 6 conveyor belt drive. Zone 1 conveyor belts extend from the surface to the No. 3 tailpiece. Firebosses in these zones are also responsible for examining the haulage roadways that are parallel to the conveyor belts. The fireboss that was assigned to Zone 1 reported off work on this shift and the normal fireboss duties were reassigned.

After Mr. Jones left Zone 2, he began fireboss duties of the conveyor belts in Zone 1. Mr. Jones parked the No. 6, 3-wheeler, which is a rubber tired battery powered mantrip, adjacent to the No. 1 conveyor belt tailpiece. Mr. Jones signed the date board/markup board on the walkway side of the No. 2 conveyor belt drive at 11:58 a.m. After signing this date board evidence indicates that Mr. Jones attempted to cross the energized/operating No. 1 conveyor belt tailpiece to sign the date board/markup board located on the offside of the No. 2 belt drive. Investigators noticed fresh debris, located on top of the belt rail, which came from the bottom of a miner's

boot. This belt rail is located just outby the No. 1 tailpiece and measured 31 inches in height from the mine floor. The belt chain at this location is suspended from the mine roof securing this belt rail. The belt chain was covered with float and rock dust except where it is believed a miner held onto it to assist him while climbing to the top of the walkway side of the tailpiece. Fresh imprints of the bottom tread from a miner's boot were observed at this location. Additionally, the outby end of the vertical steel chute wall, located on the tight/offside of this tailpiece, was covered with float dust except for a sliding hand print that measured 25 inches in length. This sliding hand print was also observed on the inside of this vertical chute. This hand print suggests that a miner had grabbed the edge of the chute to assist crossing the tailpiece. The sliding hand print suggests a miner was attempting to hold on while falling on top of the energized/operating No. 1 conveyor belt. This convincing evidence was found in an area where a limited number of miners work/travel. The No. 1 conveyor belt is 48 inches wide and travels approximately 690 feet per minute. The distance from the No. 1 tailpiece to the stacker belt, located on the surface is approximately 3,630 feet. This mine was producing coal at the time of the accident.

Based upon the above observations, it is believed the victim fell from the No. 1 belt tailpiece onto the No. 1 conveyor belt and then came in contact with a conveyor belt crossover located outby 10 feet from the tailpiece. The conveyor belt crossover is constructed of four 6 inch x 6 inch square wooden posts on the corners. The flooring, steps and hand rail are 1 inch rough cut lumber secured by nails. The distance from the top/center of the conveyor belt, without coal, measured 15 inches to the bottom of the conveyor belt crossover. The distance from coal on top/center of the conveyor belt to the bottom of the conveyor belt crossover measured 7 inches. Evidence indicates that the victim was on top of the belt when he came in contact with the bottom of the crossover. This contact dislodged flooring boards and moved the entire crossover structure 1 1/8 inches outby. Additionally, there was evidence that the victim came in contact with the mine roof at other locations along the belt, where there was close clearance. Tracking information reveals that the victim's hard hat was temporarily caught at the inby side of the hold down roller, located on the surface. The victim was at this location until enough coal was built up at this hold down roller spilling coal and ejected him to the offside of the conveyor belt.

At the end of his shift, Mr. Yoakum, who works on the surface, went to the No. 1 conveyor belt to check belt splices and rollers. Mr. Yoakum observed coal spillage on the ground on both sides of belt where the hold down roller is located and spillage at this location is not common. At approximately 2:05 p.m., Mr. Yoakum discovered a body lying on top of the coal spillage on the offside of the No. 1 conveyor belt. Mr. Yoakum immediately summoned Jonathan Sexton and Matthew Ison, AAA Mine Services, INC. employees, who were working close by. Mr. Yoakum went to a mine phone and communicated with Tom Lindsay, dispatcher, to turn the No. 1 conveyor belt off and informed him of his findings. Mr. Sexton and Mr. Ison went to the victim and Mr. Sexton checked for a pulse and none was detected.

Mine personnel from the Pleasant Hill warehouse and Laurel Run portal arrived quickly. Chris Couch, General Manager and Curtis Bailey, Production Superintendent/EMT-M were among those who arrived. Mr. Bailey checked the victim and no vital signs were detected. Mr. Couch and Mr. Bailey positioned the victim onto a stretcher and covered him until the Randolph County Emergency Squad arrived at 2:42 p.m. At 2:51 p.m., Dr. Hundley pronounced the victim deceased.

#### FINDINGS OF FACT

- 1. Owen Jones received annual refresher training on February, 16, 2017.
- 2. Mr. Jones was a Certified Underground Miner No. 2-65 UGA.
- 3. Mr. Jones was a Certified Shot Firer No. 1-3600.
- 4. Mr. Jones was a Certified Mine Foreman No. 36360-97.
- 5. Mr. Jones completed his Mine Foreman Continuing Education class on February 25, 2017.
- 6. Firebosses at the Pleasant Hill Mine work 12 hour shifts. Day shift works from 6:30 a.m. to 6:30 p.m. Afternoon shift works from 6:30 p.m. to 6:30 a.m.
- 7. There are A, B and C crews for the firebosses, with rotating days off. They work 5 shifts and have 2 days off and then work 5 shifts and have 3 days off.
- 8. The day shift fireboss assigned to Zone 1 reported off work on August 25, 2017.
- 9. Mr. Jones usually works and firebosses in the Zone 2 area.
- 10. Due to the absence of the dayshift Zone 1 fireboss, Mr. Jones was assigned to work in Zone 2 and fireboss in Zone 1. Mr. Jones had firebossed this zone in the past.
- 11. The No. 1 conveyor belt is 48 inches in width.
- 12. The No. 1 conveyor belt extends in the mine for approximately 58 blocks, and is approximately 3,630 feet in length.
- 13. The No. 1 conveyor belt travels approximately 690 feet per minute.
- 14. The No. 1 conveyor belt tailpiece is 18 feet in length, 82 inches in width and the exposed belt that carries the coal outby the steel chute walls measured 29 inches across.
- 15. The top of the No. 1 tailpiece on the walkway side measured 30 inches off the mine floor. The distance from the top of the tailpiece to the mine roof measured 47 inches to 54 inches.
- 16. The belt rail on the walkway side supporting the No. 1 conveyor extends just outby the No. 1 tailpiece and measured 31 inches from the mine floor. A belt chain at this location suspends from the mine roof securing this belt rail. The top of the belt rail at this location was visible with recent/fresh debris believed to have come from the bottom of a miner's boot. The belt chain at this location has float and rock dust except where it is believed a miner grabbed the chain to assist his climbing on top of the belt rail stepping onto the No. 1 tailpiece.
- 17. Fresh imprints from a miner's boot were also visible on top of the No. 1 tailpiece located on the walkway side. The mine floor, in this location, was damp.
- 18. Both belt switches located on each side of the No. 1 tailpiece operated properly when tested. The belt switch on the walkway side was in close proximity to where Mr. Jones stepped on top of the No. 1 tailpiece.
- 19. Evidence indicated that Mr. Jones attempted to step across the energized/operating No. 1 conveyor belt tailpiece outby the steel chute walls where it measured 29 inches across the exposed area of the belt.
- 20. The outby end of the vertical steel chute wall located on the tight/offside of the No. 1 tailpiece was coated with coal dust/rock dust mixture except for a notable sliding hand

- print measuring 25 inches in length. The sliding hand print was also visible on the inside of this vertical chute.
- 21. The conveyor belt crossover is located 10 feet outby the No. 1 belt tailpiece. Evidence indicates that usage of the crossover was infrequent.
- 22. The conveyor belt crossover is constructed of wooden materials and sustained considerable damage when the victim passed under it.
- 23. The conveyor belt crossover measured 27 inches wide. The vertical clearance from the deck of the crossover to the mine roof varied and measured 31 inches to 42 inches. The deck of the crossover measured 74 inches in length and 46 ½ inches from the mine floor.
- 24. The distance from the center of the top/center of the empty No. 1 conveyor belt to the bottom of the crossover measured 15 inches.
- 25. The distance from the center of the top of the No. 1 conveyor belt with coal present to the bottom of the crossover measured 7 inches.
- 26. Mr. Jones' safety glasses were found on the mine floor, located on the walkway side, 100 inches outby the belt crossover.
- 27. Mr. Jones signed the date board/markup board at the No. 2 conveyor belt drive on the clearance/walkway side at 11:58 a.m. Evidence indicates that Mr. Jones was attempting to cross the No. 1 tailpiece to sign the date board/markup board located on the tight/offside of the No. 2 belt drive. Mr. Jones did not sign the tight/offside date board/markup board.
- 28. The most recent fireboss examination recorded on the date board/markup board, located on the tight/offside of the No. 2 belt drive, was on the previous shift. The initials C.S., at 3:56 a.m., August 25, 2017 were present on this date board/markup board.
- 29. Mr. Jones was using the No. 6, 3-wheeler, which is a rubber tired battery powered mantrip. This mantrip was parked beside the No. 1 conveyor belt tailpiece.
- 30. The following items were found on the No. 6, 3-wheeler; gloves, dinner bucket, radio and shovel.
- 31. Mr. Jones was wearing a tracking device attached to his hardhat.
- 32. The tracking system at the mine reveals that the victim was last recorded being at the No. 1 tailpiece at 11:54 a.m.
- 33. The tracking system reveals that the victim's hard hat was at 32 block, No. 1 belt at 11:57 a.m.
- 34. The tracking system reveals that the victim's hard hat was between the airlock stoppings/doors at 11:59 a.m.
- 35. The tracking system reveals that the victim's hard hat was outside at 12:06 p.m.
- 36. The time designated on the tracking system was found to be fourteen minutes slower than the actual time.
- 37. The Carter Roag Coal Company, Pleasant Hill Mine uses Matrix tracking system.
- 38. Mr. Jones was wearing a cordless cap light, which has not been found.
- 39. Mr. Jones was wearing a Strata proximity detection pad (personal alarm detection) device.

- 40. Mr. Jones' hard hat, with the tracking device, was found intact in the coal stockpile.
- 41. Mr. Jones' proximity detection pad (personal alarm detection) was found in the coal stockpile.

#### CONCLUSION

Evidence indicates that Mr. Jones attempted to cross the No. 1 conveyor belt tailpiece to examine/fireboss the offside of the No. 2 conveyor belt drive area. No date, time and initials were found on the fireboss board to verify the No. 2 conveyor belt drive area had been examined. Therefore, Mr. Jones' attempt to cross the tailpiece failed when, for an undetermined reason, he fell onto the energized/operating No. 1 conveyor belt. Mr. Jones received blunt force trauma injuries due to contact with the bottom of the belt crossover and other close clearance areas while being transported to the surface on the No. 1 conveyor belt.

#### **ENFORCEMENT ACTION**

A non-assessed order was issued in accordance with West Virginia Code Chapter 22A, Article 2, Section 68 to preserve evidence until an investigation by the Office of Miners' Health, Safety and Training is completed.

#### **RECOMMENDATIONS**

- 1. Install a physical barrier/guarding at all the affected belt tailpieces to prohibit persons from traveling across the belt/tailpiece.
- 2. Until physical barrier/guarding is in place at each tailpiece and/or the crossover repairs are made, employees will be trained to utilize belt switches when necessary to travel to the offside of a belt.
- 3. Repair existing belt crossover located outby the #2 belt drive.
- 4. Evaluate all belt crossovers and where necessary make proper repairs to ensure they are adequate in width where height may complicate travel.

Submitted by Carter Roag Coal Company

#### **ACKNOWLEDGEMENT**

The West Virginia Office of Miners' Health, Safety and Training gratefully acknowledges the cooperation of Carter Roag Coal Company, United Coal Company LLC and the Mine Safety and Health Administration, during this investigation.

## MINE INFORMATION

COMPANY Carter Roag Coal Company
MINE COMPANY Pleasant Hill Mine
WV PERMIT #_U00104391BMSHA PERMIT #46-08194
ADDRESS 1023 Lanham Cemetery Road Tallmansville, WV 26237
COUNTY Upshur PHONE NO. 304-472-9717
DATE PERMIT ISSUED 2004
WORKING STATUS <u>Active</u>
LOCATION Laurel Run Portal Queens, WV
UNIONNON-UNION_X
DAILY PRODUCTION 2100 ANNUAL PRODUCTION TO DATE 240,000
TOTAL EMPLOYEES 181
NUMBER OF SHIFTS 3
COAL SEAM NAME AND THICKNESS Sewell A 38 inches to 60 inches
ACCIDENT INCIDENT RATE 3.6% Last 12 Months LOST TIME ACCIDENTS 9
TYPE OF HAULAGE Battery & Diesel Rubber Tire
WVOMHST INSPECTOR Larry Wine
DATE OF LAST INSPECTION August 24, 2017
NOTIFIED BY Brad Summerfield
NOTIFICATION TIME 2:24 P.M. State Reference # 42-062198
CMSP-ANNIVERSARY DATE <u>November 19, 2017</u>
CMSP-CONTACT PERSON <u>Kelvin Napier</u>