

West Virginia Office of Miners' Health, Safety and Training

MAY 12, 2014

**Report of Investigation
Underground Coal Mine Double Fatality
(Coal Outburst)**

**Brody Mining, LLC.
Brody No. 1 Mine
Permit Number U0501304-A**

**Region III
137 Peach Court, Suite 2
Danville, West Virginia 25053
Danny Jarrell, Acting Inspector-at-Large**

TABLE OF CONTENTS

- Sketches.....3
- General Information.....4
- Description
 - May 9, 2014 Incident.....4,5,6
 - May 12, 2014 Incident.....6,7,8
- Conclusion.....9
- Finding of Fact.....9
- Enforcement Action.....10
- Acknowledgment.....10
- Appendices.....10
- Mine Information.....11
- Victim Information
 - Gary Hensley.....12
 - Eric Legg..... 13

General Information

Brody Mining, LLC, Brody Mine No.1, (U0501304-A) was issued a permit to operate on April 13, 2005. The mine is located at Wharton, West Virginia in Boone County. The deep mine has one slope and one airshaft operating three (3) shifts per day and alternating five (5) day and six (6) day work weeks. This mine currently employs one hundred ninety-three (193) persons in total, including one hundred sixty-three (163) company employees and thirty (30) contract-labor employees provided by Greenleaf Services of Beckley, LLC. Coal is extracted from the Eagle coal seam, which has an average thickness of approximately seventy-two (72) inches. The average mining height ranges from five and a half (5½) to twelve (12) feet. Currently, the mine operates four (4) continuous miner sections, three (3) are advancing super sections and one (1) is a second mining (pillaring) section.

Description

A fatal coal outburst accident occurred at approximately 8:20 p.m., on Monday, May 12, 2014, at the Brody No. 1 Mine. Coal Outburst, as defined by West Virginia Code of Regulations, Title 36 Series 28 Section 3.1, is the sudden expulsion of coal and/or rock from one or more pillars or faces, accompanied by a violent release of energy. The accident occurred on the 4 West Mains, No. 1 Section in the No. 6 entry approximately fifty (50) feet outby survey station spad No. 6188 between coal pillars No. 78 and No. 79. The section was second mining the pillar blocks. Danny Jarrell, Acting Inspector at Large, was notified at approximately 8:52 p.m. by the West Virginia Division of Homeland Security and Emergency Management on May 12, 2014. Jeff Spratt, District Inspector, was the first to arrive at the mine followed by: Wayne Pauley, Acting Assistant Inspector at Large; Danny Jarrell, Acting Inspector at Large; John Kinder, Administrator; Eugene White, Director; and Bill Gillenwater, District Inspector.

May 9, 2014 Incident

On Friday, May 9, 2014, three days prior to the fatal accident, on the No. 1 section, in the No. 6 entry, between coal pillars No. 72 and No. 73, approximately 100 feet inby where the fatal accident occurred on May 12, 2014, there was a coal outburst incident with no injuries reported. During the May 9, 2014 incident, Mr. Rob Salmons (miner operator), was mining to the right, with the miner boom swung all the way toward the opposite rib due to the angle of the cut, taking the second lift from the No. 73 coal pillar during the evening shift, at approximately 10:00 p.m. Mr. Salmons was loading a shuttle car operated by Todd Agosti, standing near the standoff of the continuous miner when a loud bump occurred, which he stated, sounded like an explosion. According to Mr. Salmons and Mr. Agosti, the right rib of the No. 73 pillar block burst out into the No. 6 entry. The pressure from the outburst of coal,

forced Mr. Salmons to the mine floor and into a sitting position, against the load end of the shuttle car and covered him in coal up to his waist, entrapping him for several minutes.

Mr. Agosti stated that, after the dust cleared, he observed a gap (separation) of approximately six (6) to eight (8) inches between the mine roof and the No. 73 pillar block and could see back into the block toward No. 7 entry, ten (10) to fifteen (15) feet, or more.

Mr. Agosti also stated he observed a cavity in the No. 73 coal block that appeared to be approximately six (6) to eight (8) feet in depth and six (6) to eight (8) feet in length. Mr. Agosti stated that the force of the outburst blew rib bolts into the shuttle car tracks. He described the accident scene as being so dusty you could not see anything, including Mr. Salmons, who was calling for help. Mr. Salmons was not able to free himself from the coal that was around him.

Bobby Joe Moore (Section Foreman) and Mike Shull (Section Electrician), along with Mr. Agosti, stated that they removed the coal from around Mr. Salmons and carried him to the outby intersection to assess him for injuries. No injuries were found. Mr. Salmons took off his clothes and removed coal fragments from inside his clothing. Mr. Salmons then walked, with assistance, to the man trip to go outside. An ambulance was waiting when Mr. Salmons arrived on the surface. He was examined for injuries at that time and declined to go to the hospital after no serious injuries were found.

The second shift Assistant mine foreman, Willard Bourne, was called by the dispatcher at approximately 10:15 p.m. and redirected Mr. Bourne to go to the No. 1 section to investigate the incident. Mr. Bourne arrived on the section at approximately 10:45 p.m. Mr. Bourne and Bobby Joe Moore examined the scene in No. 6 entry and also checked roof and rib conditions in No. 7 and No. 8 entries. Mr. Bourne stated that he found spider cracks in the roof and some rib deterioration and a change in the bolting pattern which included wide metal straps all the way across the entries from rib to rib. Mr. Bourne told Mr. Moore "I would not mine this" indicating No. 7 and No. 8 entries. Mr. Bourne then told the midnight shift foreman, Aubrey Hartman, to pull the section belt conveyor back and move the equipment to the left side of the section.

The next day, Saturday, May 10, 2014, mining continued on No. 1 section on day shift. According to the Brody No. 1 Mine production report, dated May 10, 2014, (signed by Josh Anderson, Section Foreman), fifty-eight (58) feet of coal and a total of thirty-nine (39) shuttle cars were loaded from the No. 7 entry, from the left side of No. 73 block and the right side of No. 74 block before moving the continuous miner to the No. 2 entry of the next row of coal pillar blocks outby between block No. 81 and No. 82. Mr. Anderson also reported that he mined eighty-four (84) feet of coal from the No. 2 entry and ninety-six (96) feet from No. 3 entry and left the continuous miner in No. 3 entry for the evening shift.

The coal production report for the evening shift of May 10th (signed by Mr. Moore), reveals that one hundred and sixty-five (165) feet of coal was mined from the No. 3 entry and one hundred ten (110) feet of coal was mined from No. 4 entry. The report also shows that the continuous miner was hung up due to accumulation of coal and gob in No. 4 entry for a total of forty (40) minutes. Mr. Moore left the continuous miner in No. 4 entry for the day shift to begin loading coal on Monday, May 12, 2014.

Mr. Anderson's production report for Monday, May 12, 2014, reports that one hundred and three (103) feet of coal was mined from the No. 4 entry and one hundred seventeen (117) feet of coal was mined from the No. 5 entry where the continuous miner was left for the evening shift.

May 12, 2014 Incident

On Monday, May 12, 2014, at the start of the evening shift, the evening shift crews assembled in the bath house for a weekly safety meeting. Mr. Moore was summoned by the general mine foreman, Scott Thompson, for a meeting with him and mine manager, Joey Athey. During the meeting, both Mr. Thompson and Mr. Athey expressed concern to Mr. Moore, about the miner operator's safety, in view of the coal outburst incident that occurred on Mr. Moore's section, on Friday, May 9, 2014. Mr. Thompson suggested that Mr. Moore should set two (2) timbers to protect the miner operator while mining the lifts from the pillar block. Mr. Athey suggested that Mr. Moore reposition the continuous miner operator to the opposite side of the entry from where the lifts are mined from the block. Mr. Moore then went down stairs for a final meeting with his crew before going underground. During this meeting, the crew discussed the instructions Mr. Moore was given by Mr. Athey and Mr. Thompson. According to Mr. Agosti, he and other crew members thought the idea of setting two (2) timbers along the rib to protect the miner operator was a bad idea and laughed about it. He stated that, in his opinion, setting timbers would not stop what happened to Mr. Salmons on Friday, May 9th.

After the meeting, the evening shift crew for the No. 1 section, supervised by Mr. Moore, entered the mine and traveled to the 4 East Mains, No. 1 section via a diesel powered, rubber tired personnel carrier.

Prior to the accident, the scheduled work activities progressed without incident. Mr. Legg (miner operator), completed second mining from the No. 77 and No. 78 blocks in No. 5 entry. Then the continuous miner was moved to the No. 6 entry in preparation for second mining the No. 78 and No. 79 blocks. Mr. Legg took the first lift off the left side of No. 78 block and then took the first lift off the No. 79 block to the right. Mr. Legg had mined approximately ten (10) feet from the second lift of the No. 78 block and finished loading Mr. Agosti's shuttle car. As Mr. Agosti left to go to the feeder, Mr. Legg backed the continuous miner out of the cut to "pan

up" (clean up coal spilled in the roadway) and also sprayed coal dust off the continuous miner's head lights. Gary Hensley (Mobile Roof Support operator), was assisting Mr. Legg on the continuous miner. According to statements given by witnesses, the mountain suddenly bumped loudly and coal burst out from the No. 79 block causing coal dust to be raised up from the mine floor.

Mike Shull, was standing by the No. 2 and No. 4 mobile roof supports in the last open crosscut in No. 6 entry when the outburst occurred. Mr. Shull stated that the outburst was so violent that he had to grab the mobile roof support cable. Additionally, Mr. Shull could not see anything for several seconds due to the amount of dust.

Mr. Shull then ran toward the continuous miner but stopped at the outby corner of the No. 79 block when he encountered a thick cloud of dust and was not able to see anything in the area of the continuous miner. Moments later, when the dust began to settle, he stated that the lights under the canopies of No. 1 and No. 3 mobile roof supports could be seen.

Mr. Moore testified that he was standing two crosscuts outby from the pillar line in No. 3 entry talking to Jackie Bailey (Roof Bolter operator), when the outburst occurred. Mr. Moore stated that the vibration from the outburst was so great that his vision of Mr. Bailey was momentarily blurred. Mr. Bailey then ran toward the continuous miner when the mountain bumped again resulting in dust rising from the mine floor. Both Mr. Moore and Mr. Bailey then ran down the No. 6 entry to safety.

As the coal dust in the air cleared, Mr. Moore, Mr. Agosti and Mr. Shull ran to the continuous miner where they encountered an accumulation of coal extending from rib to rib, approximately four and a half (4 1/2) feet deep, with only a small opening between the top of the coal and the roof. The roof of the No. 6 entry was later determined to be between seventy-three (73) and seventy-eight (78) inches high.

According to the statement of Mark White (Chief Electrician), the height of this small opening between the top of the accumulation and the roof was approximately twenty (20) to twenty-four (24) inches. Neither Mr. Hensley nor Mr. Legg could be seen. Mr. Shull yelled several times to them, but received no response.

Mr. Moore then repositioned the outby No. 2 and No. 4 mobile roof supports located on the left side of the last open crosscut between No. 5 and No. 6 entry, through the crosscut over to the No. 6 intersection to provide additional roof support.

Mr. Moore then used a battery operated scoop to begin removing coal out of the No. 6 entry to gain access to the last observed location of Mr. Legg and Mr. Hensley. The force of the outburst

caused the continuous miners' cable to be thrown across to the opposite side of the entry and covered by coal. Coal removal was hindered by the miner cable dragging coal out of the bucket when trammed out of the entry. After several scoop loads of coal were removed, verbal contact was made with Mr. Hensley. Mr. Agosti said to Mr. Moore, "Bobby, we got a man alive, we got to try to get him". Mr. Moore then parked the scoop in the outby crosscut.

Mr. Moore, Agosti, Buskirk and Bailey then crawled over the coal pile and located Mr. Hensley and Mr. Legg. Mr. Moore assessed vital signs on Mr. Legg and found no pulse or respiration. Work proceeded to recover Mr. Hensley.

Both miners were struck by the coal from the outburst. The force of the outburst pushed Mr. Legg into the standoff of the continuous miner and Mr. Hensley was pushed against the rear bumper under the loading boom.

Mr. Hensley had no visible injuries and was able to communicate with the rescuers as they removed the coal to free him. Mr. Hensley then became unresponsive during the rescue effort and when his vital signs were assessed, no pulse or respiration could be detected.

At that time, the mountain bumped again and Mr. Moore decided to remove everyone from the accident area and install additional roof supports, in the form of eight (8) wooden cribs, up the center of the No. 6 entry from the outby crosscut, toward the continuous miner, before the recovery efforts resumed.

Mr. Hensley was removed from the accident scene at 12:03 a.m. and Mr. Legg at 12:21 a.m. Both men were taken to the surface, via a diesel powered, rubber tired, personnel carrier, arriving at approximately 12:45 a.m., where Boone County Emergency medical services personnel were waiting.

Mr. Hensley and Mr. Legg were pronounced deceased by Dr. Vontkins of Charleston Area Medical Center Med Base at 1:09 a.m. on May 13, 2014. Mr. Hensley and Mr. Legg were transported to Wharton-Barrett Volunteer Fire Department by the Boone County Ambulance Authority where the medical examiner, Mike Casey, conducted a visual examination of the deceased miners and obtained information for his report. From there, Mr. Hensley and Mr. Legg were transported to the Chief Medical Examiner's Office at 619 Virginia Street, Charleston, West Virginia.

Conclusion

On May 12, 2014, Eric Legg, a continuous miner operator and Gary Hensley, a roof bolter operator/mobile roof support operator, while working the evening shift on the No. 1 coal producing section on 4 East Mains, received fatal injuries when a coal outburst occurred in the No. 6 entry between coal pillar blocks No. 78 and No. 79. Mr. Legg and Mr. Hensley were impacted by the coal outburst and died due to the injuries they received.

Findings of Fact

1. On Friday, May 9, 2014 at approximately 10:00 p.m., on the No. 1 section, in the No. 6 entry, between coal pillars No. 72 and No. 73, approximately 100 feet inby where the fatal accident occurred on May 12, 2014, there was a coal outburst incident with no injuries. As a result of the coal outburst, regular mining activities were disrupted on the No. 1 section for over one hour.
2. Brody Mining Co. failed to notify the Mine and Industrial Accident Emergency Operations Center of the occurrence of the May 9, 2014, coal outburst.
3. On Monday, May 12, 2014 on the No. 1 section, in the No. 6 entry between coal pillars No. 78 and No. 79, there was another coal outburst which resulted in a double fatality.
4. During the investigation of the double fatality mine accident, OMHS&T found that the MRS situated in the area of the accident did not show any signs of excessive weight.
5. OMHS&T also found, during its investigation, that the rib bolt plates in adjacent entries (7 & 8) were showing signs of excessive pressure as indicated by signs of being forced away from the pillar and around the bolt head.
6. OMHS&T's investigation also revealed that the coal in pillar No. 79 was fractured and in a crumbled state.
7. OMHS&T also found that the test hole near survey station 6151 located in the No. 6 entry demonstrated that the roof had shifted. This was shown when a tape measure extended only nine (9) inches into a hole which had previously been drilled eight (8) feet in depth.
8. The May 12, 2014 coal outburst from the rib of block No. 79 on the No. 1 section resulted in the death of Mr. Legg and Mr. Hensley.

Enforcement Action

The following actions were taken as a result of the investigation.

The OMHS&T issued a non-assessed control order in accordance with Chapter 22A, Article 2, Section 68 of the West Virginia Code to preserve the accident scene and complete an investigation.

The OMHS&T issued a special assessed notice of violation to Brody Mining Co., during this investigation. The violation was written as follows:

The OMHS&T has issued violation 146452 Title 36, Series 10, Section 3.1, which provides that the roof, face and ribs of areas where persons work or travel shall be supported or otherwise controlled to protect persons from hazards related to falls of the roof, face, ribs and coal or rock burst, was not complied with, in that, on the evening shift of May 12, 2014, on the active, producing No. 1 section, a fatal coal outburst accident occurred at approximately 8:20 p.m., while pillar mining coal between the No. 78 and 79 coal pillar in the No. 6 entry, approximately fifty (50) feet out by survey station No. 6188. A mountain bump, accompanied with a loud explosion and a violent release of energy, caused the coal rib of the No. 79 coal pillar block to suddenly outburst, resulting in fatal injuries to the continuous miner operator, and the mobile roof support operator, This is a violation of a safety rule, is of a serious nature, and involved a double fatality.

Two (2) additional violations were issued during the investigation.

Acknowledgment

The West Virginia Office of Miners' Health, Safety and Training gratefully acknowledges the cooperation of the employees and management of Brody Mining, LLC, Brody No. 1 Mine, the Mine Safety and Health Administration, and MSHA's Office of Technical Support during this investigation.

Appendices

- Mine Information
- Victim Information
- Notice of Violation

Mine Information

COMPANY Brody Mining, LLC

MINE NAME Brody No. 1

WV PERMIT U-0501304-A MSHA MINE ID NUMBER 46-09086

ADDRESS P.O. Box 29 Wharton, WV 25208

COUNTY Boone PHONE NUMBER (304) 247-8202

DATE PERMIT ISSUED April 13, 2005

WORKING STATUS Active

LOCATION 33207 Pond Fork Road Wharton, WV

UNION _____ NON-UNION X

DAILY PRODUCTION 7,500 TONS ANNUAL PRODUCTION TO DATE 782,642 TONS

TOTAL EMPLOYEES 193

NUMBER OF SHIFTS 3

COAL SEAM NAMES(S) AND THICKNESSES Eagle 72"

ACCIDENT INCIDENT RATE 3.91 LOST TIME ACCIDENTS Through April--4

TYPE OF HAULAGE shuttle car- section, belt to outside

WVOMHST INSPECTOR Jeff Spratt and Steve Akers

DATE OF LAST INSPECTION February 27, 2014

NOTIFIED BY Justin Ray NOTIFICATION TIME 8:52 p.m. on May 12, 2014

CMSP ANNIVERSARY DATE May 24, 2014

CMSP CONTACT PERSON Justin Ray