Virginia Department of Mines, Minerals & Energy
Division of Mines

Accident Investigation Report
Underground Coal Mine

Fatal Rib Fall Accident

March 16, 2015

Paramont Coal Company Virginia, LLC

Deep Mine 41
Mine Index No. 14888AA
McClure Route 773, Dickenson County, Virginia

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Overview

On March 16, 2015, at approximately 5:00 a.m., David William Brummitte, a 34-year old owl shift temporary fill-in section foreman, was fatally injured when he was struck by a large section of coal rib that fell into the crosscut from the right inby rib in the No. 4 entry left crosscut on the No. 3 retreat mining section. Mr. Brummitte was pinned between the fallen rib and a shuttle car parked in the No. 4 entry left crosscut on the No. 3 section. The section of fallen rib that struck Mr. Brummitte measured approximately 90 inches long, 45 inches high and varied in thickness from 15 to 18 inches, weighing approximately 1.4 tons. Mr. Brummitte was conducting a preshift mine examination when the accident occurred. Mr. Brummitte had 10 years total mining experience and 20 weeks experience as a fill-in section foreman.

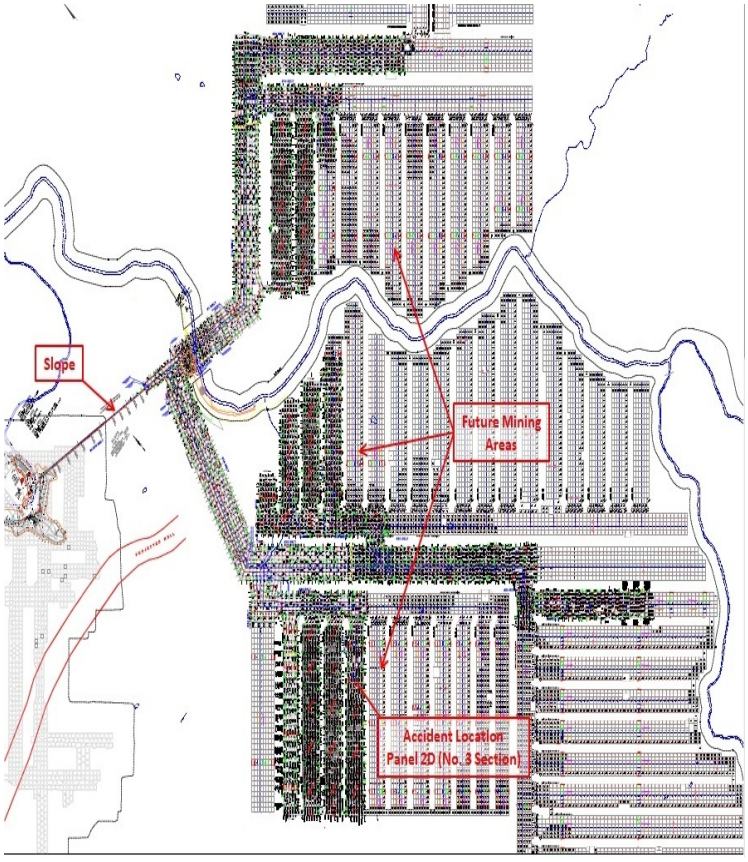
Accident Investigation:

The following investigation was conducted pursuant to §45.1-161.78.E of the Coal Mine Safety Laws of Virginia:

The Department of Mines, Minerals & Energy's (DMME) Division of Mines (DM) was notified of the accident on March 16, 2015, at 5:15 a.m. An investigation team made up of Mine Safety and Health Administration District 5 representatives and DM representatives promptly responded to the accident. Photographs, measurements, survey mapping, and personnel interviews were conducted during the investigation. The interviews were held on March 17 and 18, 2015, with persons considered to have knowledge of the facts concerning the accident. A list of persons participating in the investigation is provided in Appendix A.

General Information:

The Paramont Coal Company Virginia, LLC, Deep Mine 41, a subsidiary of Alpha Natural Resources, Inc., is a large slope mine that started operation in 2008. The mine has two surface portals located in the McClure section of Dickenson County, Virginia, on state route 773. The 25 feet wide 9 feet high slope was developed for a distance of approximately 2,911 feet on an 8 degree decline from the surface into the underlying Jawbone coal seam. The mine has a vertical ventilation shaft for the No. 1 exhaust fan located at crosscut No. 11 in the Mains. The split ventilation shaft is 402 feet deep and serves as an intake / return air shaft. The ventilation shaft is also equipped with a Gray-Eering emergency escape hoist, which is designated as part of the primary escapeway. Coal is mined from the Jawbone coal seam which averages approximately 48 to 65 inches in height with overall mining heights ranging from 72 to 84 inches. The mine has five continuous mining machine units that produce approximately 13,000 tons of raw coal daily using shuttle car haulage. The sections are ventilated with a split ventilation system using exhaust line curtain. The coal is transported to the surface by conveyor belts exiting the slope tunnel where the coal is transported by overland conveyor belts to the nearby coal preparation plant. The No. 3 section was a retreat mining section located on the No. 2D panel, which was developed with seven entries using 90 x 65 feet centers. Second mining began on the 2D panel on February 13, 2015 and 21 lines of pillars had been mined on the 2D panel. The No. 3 section was located at crosscut No. 14 when the accident occurred. The mining equipment on



the No. 3 section consisted of a Joy 14/15 CM continuous mining machine with remote control, shuttle car haulage, battery powered scoops, and walk-through Fletcher dual boom roof bolting machines. Mobile roof support (MRS) units are also used during pillar extraction.

The workforce consists of 255 mine personnel working three shifts five days per week. Day shift and evening shift production crews work rotating schedules followed by an owl shift maintenance shift and a weekend crew. Diesel powered rubber tired personnel carriers are primarily used for transportation and supplies. The owl shift was in progress when the accident occurred. A regular inspection was initiated at the mine by DMME on January 6, 2015, and the inspection was ongoing when the accident occurred.

Description of the Accident:

On Sunday, March 15, 2015, Mr. Brummitte arrived at the mine at approximately 7:15 p.m. to conduct the preshift mine examination of the No. 3 section for the on-coming owl shift. The preshift examination of the No. 3 section was conducted from 7:40 p.m. to 8:48 p.m., and the examination report was brought to the surface by Mr. Brummitte where the examination results were recorded prior to the start of the owl shift.

The No. 3 section crew consisting of nine men supervised by Mr. Brummitte entered the mine at 11:00 p.m. on March 15, 2015, and traveled to the No. 3 section arriving at approximately 11:30 p.m. Donald Cook, maintenance supervisor, and three electrical repairmen also arrived on the No. 3 section at 11:30 p.m. to conduct equipment maintenance and service work. The section mining equipment was positioned to prepare for the section belt and power move and equipment maintenance. The owl shift move crew conducted section belt and power moves on a daily basis on the No. 3 section during the first part of the shift then worked on equipment set-up, clean-up work, and roof bolting operations as needed during the remainder of the shift.

Arriving on the section, Mr. Brummitte worked with James Cooper, outby belt repairman, and Justin Stewart, roof bolting machine operator, performing belt recovery and installation while Jerry Kelly and Billy Mullins, scoop operators, and Jeremy Salyers, roof bolting machine operator, moved and set-up the section power center. During this time, Mr. Cook, Odell Payne, Jerry McLoy, and Jeffrey Shelton, electrical repairmen, conducted maintenance and service work on the face equipment to prepare for the retreat mining scheduled for the oncoming day shift production crew.

As preparations were being made to move the power center back one crosscut, Mr. Brummitte instructed Mr. Mullins to examine a suspected loose rib that he had observed earlier along the left rib in the area where the power center was to be installed. Mr. Mullins determined the section of rib was loose and needed corrected. Mr. Mullins took the loose rib down using a scoop then cleaned the fallen rib material up before proceeding to install the power center at this location. The move crew completed the belt and power move then took their lunch break in the No. 6 entry, outby the section loading point. The coal feeder was parked in the intersection inby the belt tailpiece to allow a jack to be installed on the feeder by the maintenance crew. The work planned for the remainder of the shift included completing the section set-up work, relocating the

refuge shelter, conducting roof bolting operations to spot roof bolts across the section, and setting-up the continuous mining machine for production.

At approximately 4:00 a.m., Michael Shelton, owl shift outby shift foreman, arrived on the section and spoke briefly with the move crew at their lunch area then departed to check the section belt tailpiece located in the No. 4 entry on the No. 3 section. Mr. Shelton had traveled to the section to check the belt tailpiece to determine if additional skirting was needed to repair the tailpiece as indicated by the shift work order. Mr. Shelton called for Mike Shell and Daniel Bowen, outby belt repairman, to come to No. 3 section and repair the tailpiece. Mr. Shelton departed and traveled to the No. 2 entry in the last open line of crosscuts (LOCC); and as he started walking towards the No. 5 entry checking the section, he heard Mr. Brummitte holler at him. Mr. Brummitte was making an air measurement when Mr. Shelton met him between the Nos. 2 and 3 entries. Mr. Brummitte asked Mr. Shelton to move the continuous mining machine for him. Mr. Shelton told Mr. Brummitte he would get a proximity control and move the continuous miner. Mr. Shelton traveled to the maintenance mantrip ride where the maintenance crew was having their lunch break and got a proximity control from Mr. Cook then traveled back to the continuous mining machine located in the No. 3 entry in the LOCC.

During this time, Mr. Kelly was operating his scoop in the No. 5 entry traveling towards the LOCC when Mr. Brummitte flagged him and asked for a slate bar. Mr. Brummitte was located between the LOCC and the next outby line of crosscuts when he flagged Mr. Kelly. Mr. Kelly gave Mr. Brummitte the slate bar off of the scoop and observed Mr. Brummitte travel back towards the LOCC. Mr. Kelly and Justin Stewart, roof bolting machine operator, assisted Mr. Shelton with moving the continuous miner from the No. 3 entry to the No. 7 entry working place traveling the line of crosscuts outby the LOCC. When the miner was set-up in the No. 7 entry, the men began hanging the miner cable up across the intersections in Nos. 6 and 5 entry haulage ways. Arriving in the No. 4 entry, they noticed the center shuttle car cable was hung across the intersection; and the car had to be moved before hanging the miner cable across the No. 4 entry intersection.

Mr. Kelly traveled to get the cable crossover(s) off of his scoop located in the No. 5 entry while Mr. Steward traveled up the No. 4 entry to move the shuttle car back from where it was parked in the No. 4 entry left crosscut (LOCC). At this time, Mr. Stewart observed Mr. Brummittee's cap light on the mine floor near the dump end of the shuttle car. He ran to the area and found Mr. Brummitte entrapped between the shuttle car frame and a large section of fallen rib, which was positioned against his right side chest area. The rib roll fell from the inby rib of the No. 4 left crosscut. Mr. Brummitte was in a crouched semi upright position and was kneeled down on one knee facing the direction of the No. 3 entry with his left shoulder against the pump motor compartment of the shuttle car.

Mr. Stewart yelled for help and Mr. Shelton and Mr. Kelly immediately ran to Mr. Brummitte's location. The men checked to see if Mr. Brummitte was breathing while attempting to move the rib roll off of him. The rib roll was too heavy to move. Mr. Shelton instructed Mr. Stewart to get help, and he traveled No. 4 entry towards the section tailpiece and yelled for Mr. Shell and Mr. Bowen for help. Mr. Shell notified surface personnel of the accident using his handheld radio. When Mr. Shell and Mr. Bowen arrived at the accident scene, five men used two slate

bars attempting to lift the rib roll off of Mr. Brummitte; but their efforts were unsuccessful. Mr. Kenneth Webb, assistant shift foreman, was located on the No. 1 section and had overheard the radio call concerning the accident.

Mr. Shelton left to get help and called outside using the section telephone to verify that Med-Flight had been notified; and also talked with Mr. Webb on the mine telephone giving him further information concerning Mr. Brummitte's condition. Mr. Webb immediately traveled to the No. 3 section to assist. When Mr. Shelton returned to the accident scene, attempts to lift the section of rib to free Mr. Brummitte were ongoing. Mr. Shelton traveled to get the section mini-trac forklift located at the section loading point and brought it to the accident scene. Mr. Shelton traveled the No. 4 entry with the forklift; and from the No. 4 entry intersection adjacent to Mr. Brummitte, carefully maneuvered the forklift in place and lifted the section of rib allowing Mr. Brummitte to be pulled out from underneath the rib roll to a safe location.

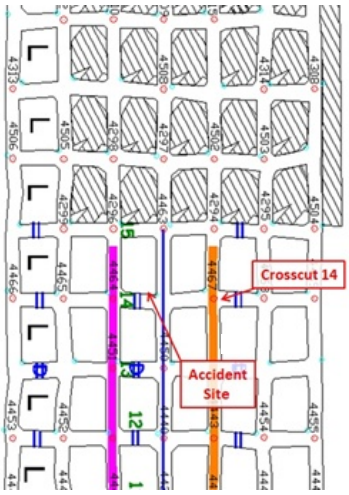
Mr. Cook, certified First Responder, who had overheard Mr. Shell's radio call arrived and took charge of administering first aid care to Mr. Brummitte. Mr. Brummitte had no vital signs and was unresponsive. Cardio Pulmonary Resuscitation (CPR) was started immediately. Mr. Stewart left to get the section first aid supplies and met Mr. Mullins, who was bringing the first aid supplies with his scoop. The scoop was parked in the No. 3 entry adjacent to the accident scene. The first aid supplies included oxygen equipment, which was administered to Mr. Brummitte. Mr. Stewart traveled to the power center and brought the Automatic External Defibrillator (AED) unit to the accident scene. The AED and bag-valve mask oxygen equipment was administered to Mr. Brummitte. The AED analyzed his heart but did not advise shock but prompted to continue CPR. Mr. Brummitte was secured to a backboard and transported to the surface using the section mantrip. Resuscitation efforts continued as Mr. Brummitte was transported to the surface.

Arriving on the surface, the Med-Flight emergency medical personnel arrived and took over care. The Med-Flight emergency medical services personnel and Clintwood Volunteer Rescue Squad, Inc. medical personnel continued administering care to Mr. Brummitte during his transport by ambulance to the Dickenson County Community Hospital, Clintwood, Virginia, where he was pronounced dead at approximately 6:47 a.m.

During this time, the section crew gathered at the section power center and awaited further instructions. Mr. Cook instructed mine personnel to install caution tape to restrict access to the accident scene.

Geological Conditions:

There was no over mining or under mining at this mine. The overburden at the accident scene was approximately 700 feet. An analysis of pillar stability for the No. 3 retreat mining section was conducted using the Analysis of Retreat Mining Pillar Stability (ARMPS) program provided by the National Institute for Occupational Safety and Health (NIOSH). The values exceeded the NIOSH recommended pillar stability factors of



safety. In addition to the five pillars extracted during retreat mining, a 32 foot deep barrier cut was also mined from the 130 foot coal barrier remaining between the 2D panel and 2C panel. The overall pillar stability did not appear to be a contributing factor with respect to the rib roll accident.

Coal pillar rib failure can occur as the edges of the pillar yield under the excessive pressure of overburden rock weight, abutment pressures, as well as fractures / cracks or other natural defects that can cause sections of rib to become unstable, detached, and fall away from the pillar. The rib roll material located at the accident scene consisted of coal with partings of shale rock and slicken side rock embedded in the seam. Noticeable slicken side rock was also present at the roof line at the topmost part of the coal seam. The slicken sides probably contributed to the instability of the section of fallen rib.

The type of rib roll that occurred is generally referred to as a vertical slab or plate-like rib failure. Loose / fractured ribs were observed at a number of locations on the No. 3 section for a distance of five crosscuts outby the pillar line. Most of the fractured rib conditions would have been located outby the section loading point prior to the belt being moved back one crosscut by the owl shift move crew when the accident occurred. The rib conditions did not appear to have resulted from abutment pressures from pillar extraction but most likely occurred as a result of the structural features of the coal seam.

Roof Control Plan

A consolidated base roof control plan dated January 12, 2015, was submitted and approved on February 5, 2015. The mine roof on the No. 3 section was permanently supported using 6-foot fully grouted resin bolts installed with oversized bearing plates and roof caps (pizza pans). Two 14-foot cable roof bolts were also installed as supplementary roof support after every third row of primary roof support in the entries and crosscuts during initial advance of the section. Wire mesh, oversized bearing plates, roof caps, and metal roof straps were also utilized as supplemental roof / rib support as needed. The maximum width of the entries and crosscuts was 20 feet. The No. 3 section was using a right to left mining sequence during pillar extraction. A maximum deep cut depth of 32 feet was used only during second mining.

Rib Support:

Page 16 of the approved roof control plan addressed rib control. The plan stated adverse ribs (ribs defined as excessive sloughing or fracturing due to stress from excessive cover, over mining / undermining, pillaring, etc., geological conditions or ribs in excess of 9 feet high) will be either taken down or supported. These supports will include but not be limited to:

- Angle brackets
- Timbers
- Cribs
- Steel supports (Alternate Crib Support (ACS's), jacks, etc.)
- Mesh
- Wire ropes

- Screen
- Rib bolts
- Any combination of these materials

The plan also addressed installation of roof bolts used as supports for adverse ribs:

- Installed on 8-foot centers lengthwise and maintained within 40 feet of the face
- Minimum length will be 4 feet
- When mining height exceeds 9 feet, an initial rib bolt will be installed in the top 1/3 of the coal rib width, and additional rib bolts installed where needed in the lower portion of the rib
- Rib bolts will not be installed in areas where crosscuts are to be turned or cut through
- Rib control will be isolated to the areas identified as meeting the criteria for adverse condition, which would require extra support.

The area of the No. 3 section where the accident occurred had rib bolts installed at the rounded corners of coal pillars. During development of the 2D panel, two or more 6-foot resin roof bolts were installed with oversized bearing plates and roof caps (pizza pans) on either side of the corners of each pillar to secure the corner. Metal roof straps were also installed with rib bolts to secure the pillar corners at isolated locations on the section. The rib walls in the No. 4 left crosscut did not have rib bolts installed. Rib bolts were observed installed in the ribs along entries and crosscuts at several locations on the section and outby the section loading point. However, the rib bolts were installed at isolated locations and the rib bolts were not installed using installation patterns.

Mine personnel stated that full rib bolting using installation patterns was implemented on the No. 3 section starting at crosscut No. 23 and continued until the 2D panel was completed. The primary purpose for implementing full rib bolting at this location on the 2D panel was due to the coal seam height being consistently seven feet or greater. Utilizing pattern rib bolting was a mine policy when the seam height reached seven feet or more.

Statements from mine personnel indicated it was a normal practice to take down or scale down loose ribs daily on the No. 3 section. Mine personnel also stated roof bolting operations were conducted by the owl shift move crew on a daily basis to install additional roof supports as needed across the section at areas where either wide roof bolt spacing occurred as a result of taking down loose ribs, where loose drawrock was taken down or needed additional support, and to replace dislodged roof bolts or rib bolts.

The roof control plan was revised to address additional rib support measures. The revision was approved on March 18, 2015, and included the following:

- On initial advance in areas that are greater than seven feet in height shall be supported by installing rib supports (rib bolts minimum 4 feet in length) in a star pattern on approximately 8-foot centers and maintained to within 30 feet of the face.

- On initial advance, areas that are less than seven feet in height shall be supported by installing rib supports (rib bolts minimum 4 feet in length) in a "V" pattern on approximately 8-foot centers and maintained to within 30 feet of the face.
- When additional supplemental rib supports may need to be installed due to adverse rib conditions, other types of rib support may be used in addition to rib bolts such as standing timbers, jacks, or cribs. Any standing support installed for rib supports will be secured from falling into a travelway.

Mine Examination Records:

The March 15, 2015, pre-shift mine examination report signed by Mr. Brummitte prior to the start of the owl shift on March 15, 2015, was reviewed. The time of the examination was from 7:40 p.m. to 8:48 p.m. and the report was brought outside at 9:40 p.m. by Mr. Brummitte on March 15, 2015. The following conditions and actions taken during the preshift examinations were recorded by Mr. Brummitte:

Location	Condition	Action Taken
1	Draw Rock	Scaled down
2	Loose Rib / Dead Bolt	Pulled / Flagged
3	Loose Rib	Pulled
4	Loose Rib / Bad Corner	Pulled / Flagged
5	Loose Rib	Pulled
6	Loose Rib / Bad Corner	Pulled / Flagged
7	Loose Rib	Pulled

The preshift and onshift examination records provided for each shift on the No. 3 section were reviewed from March 8, 2015 through March 15, 2015. The conditions and actions taken pertaining to loose ribs observed in each of the working places on the section were consistently recorded in the examination records on each shift. With the exception of one rib brow condition recorded in an evening shift pre-shift examination record for the No. 5 entry on March 12, 2015, there were no other actions recorded that indicated roof bolts were installed at areas where loose ribs were observed. All the examination records indicated "pulled" as the action taken to correct loose rib conditions on the No. 3 section.

Physical Factors / Other Factors:

The accident investigation revealed the following:

1. The time of the accident was estimated to be approximately 5:00 a.m. The accident occurred in the No. 4 entry left crosscut on the No. 3 section approximately 50 feet right from survey station No. 4464. Mr. Brummitte was discovered entrapped between a section of fallen rib and a parked shuttle car located in the No. 4 entry left crosscut.
2. There were no eyewitnesses to the accident. Mr. Brummitte was observed performing preshift examination duties on the No. 3 section prior to the accident.

3. The rib material broke after it separated and fell from the coal pillar into the crosscut. The section of fallen rib that struck Mr. Brummitte measured approximately 90 inches long, 45 inches high, and varied from 15 to 18 inches thick. The fallen rib broke into two sections. The estimated weight of the section of fallen rib that entrapped Mr. Brummitte was approximately 1.4 tons. Smaller sections of broken rib material surrounded the larger section of rib roll on the mine floor and small sections of fallen rib were located on the mine floor along the right inby rib of the crosscut. The cavity along the inby rib of the crosscut measured approximately 19 feet in length.
4. Mr. Brummitte's hard hat and cap light were located on the mine floor near the dump end of the center shuttle car in the No. 4 entry left crosscut when he was found by Mr. Stewart.
5. The height at the accident scene measured 82.5 inches and the mining height of the No. 4 entry left crosscut ranged from 78 inches to 90 inches. The width of the No. 4 left crosscut ranged from 18 feet to 20 feet. The crosscut width at Mr. Brummitte's location was 18.75 feet.
6. The shuttle car parked in the No. 4 entry left crosscut at the accident scene was identified as the center shuttle car on the 003 section and was assigned company No. SC 82A. The shuttle car was a rebuilt Maxxim 10-SC shuttle car, Serial No. MR51-SC82A. The length of the shuttle car was 28 feet 7 inches and the chassis height was 37.25 inches.
7. The battery powered scoop used to deliver first aid supplies to the accident scene was parked in the No. 3 entry intersection at survey station No. 4464 at the approach to the No. 4 entry left crosscut. The mini-trac forklift was parked in the No. 4 entry intersection adjacent to the accident scene. Three long handle slate bars (pry bars) were also located near the accident scene.
8. The mine floor condition at the accident scene in the No. 4 entry left crosscut was dry and level with no apparent floor irregularities. The roof conditions through the crosscut also had no irregularities.
9. Mr. Brummitte's position was estimated to be approximately 56 inches from the right inby rib of the No. 4 entry left crosscut when the rib material fell. Mr. Brummitte was found entrapped between the shuttle car frame and a large section of fallen rib, which was positioned against his right side chest area. Mr. Brummitte was trapped in a crouched semi upright position and was kneeled down on one knee facing the direction of the No. 3 entry with his left shoulder against the pump motor compartment of the shuttle car.
10. Mr. Bowen stated as they were attempting to lift the section of rib off of Mr. Brummitte, he crossed over the shuttle car to the other side of the section of fallen rib where he retrieved a slate bar located on the mine floor near Mr. Brummitte's feet. Mr. Bowen used this slate bar to assist in the attempts to lift the section of rib, to free Mr. Brummitte.
11. One of two rib roof bolts installed in the rounded inby left pillar corner of the No. 4 entry intersection was dislodged from the rib apparently as a result of the rib roll.
12. Dates, times, and initials (DTI) certifying Mr. Brummitte's preshift mine examinations on the No. 3 section prior to the accident were observed at the following locations: section power center "3-16 DB 4:08 a.m."; No. 1 entry at the pillar line, "3-16 DB 4:24 a.m."; No. 2 entry at the pillar line "3-16 DB 4:27 a.m."; No. 3 entry at the pillar line "3-16 DB 4:32 a.m.", and the No. 4 entry at the pillar line "3-16 DB 4:35 a.m." The entries were numbered 1 through 7 from left to right on the section. The sequence of examination times indicated Mr. Brummitte had traveled through the No. 4 entry left crosscut prior to

the accident. No other DTI's belonging to Mr. Brummitte were found in the Nos. 5, 6 and 7 working places on the No. 3 section.

13. The mine utilizes Strata CommTrac wireless communications / tracking and mine atmospheric monitoring systems. The CommTrac system consists of an underground network of fixed Communication Nodes that communicate with individual miner-worn mobile devices, Miner Communicators, to transmit two-way data between the surface and underground. The CommTrac system provides tracking and messaging. CommTrac provides continuous tracking within 50 feet mine wide showing breadcrumb tracking and direction of travel. Every 30 seconds the Miner Communicators transmit location data that travels through the mesh network to a user interface at the surface.

14. The data log of the Strata CommTrac communication / tracking system provided during the March 16, 2015, owl shift on the No. 3 section was reviewed. The tracking system indicated Mr. Kelly and Mr. Brummitte were together at a common location on the No. 3 section at 4:51 a.m. Mr. Kelly stated that Mr. Brummitte had asked him for a slate bar and that he gave him the slate bar off of his scoop while they were located in the No. 5 entry. The tracking system indicated Mr. Brummitte was located in the No. 4 entry at 5:00 a.m. after receiving the slate bar from Mr. Kelly, and remained in the general area until Mr. Stewart found him entrapped by the rib fall in the No. 4 entry left crosscut. The tracking system indicated Mr. Stewart was in the No. 4 entry at 5:10 a.m., which correlates with interview statements concerning the discovery of the accident.

15. A review of the company's training records indicated that Mr. Brummitte's training was current. Mr. Brummitte received certifications by DMME to perform work as a First Class Mine Foreman (No. 100139) on October 28, 2014; General Coal Miner Underground certification on November 22, 2004; and Gas Detection certification on December 1, 2004.

16. The preshift and onshift mine examinations records were reviewed and the records were complete. There were no entries in Mr. Brummitte's March 15, 2015, preshift examination record relating to the No. 4 entry left crosscut where the accident occurred. The mine personnel working on the No. 3 section did not observe any loose rib conditions in the No. 4 entry left crosscut prior to the accident.

Conclusion:

On March 16, 2015, at approximately 5:00 a.m., David William Brummitte, temporary fill-in section foreman, was fatally injured when he was entrapped against a parked shuttle car by a section of fallen rib that fell from the inby rib in the No. 4 entry left crosscut on the No. 3 section. Based on interview statements and tracking system information, it is probable that Mr. Brummitte may have observed a loose rib condition in the No. 4 entry left crosscut while conducting his preshift examinations which prompted him to obtain a slate bar and return to this location to correct the condition. The fatal injuries sustained by Mr. Brummitte were a result of blunt force trauma.

Enforcement Action:

The following enforcement actions were taken as a result of the investigation:

- Order of Closure No. HLH0010979 was issued under §45.1-161.91A (ii), of the Coal Mine Safety Laws of Virginia to preserve the scene of the accident on the No. 3 section pending investigation. The order was later modified to allow for mine examinations and rehabilitation work to install additional rib support on the No. 3 section. Areas on the section where fractured or damaged rib conditions were identified and flagged during the investigation were corrected as part of the rehabilitation work. An action plan was required for approval by the Division of Mines to address safety precautions to prevent a similar occurrence.
- Notice of Violation No. HLH0011113 was issued under §45.1-161.108.A of the Coal Mine Safety Laws of Virginia for the coal ribs not being secured or controlled to protect miners from rib falls at the accident scene.

Recommendations:

1. All miners will receive retraining concerning potential hazards associated with loose coal ribs and work place examinations.
2. Employees should make frequent and thorough roof and rib examinations.
3. Adequately support or scale down any loose roof or rib material from a safe location, use a bar of suitable length and design when taking down loose roof or ribs.
4. Employees should be aware of their surroundings at all times and be alert to potential hazards when working or traveling near ribs.
5. Areas of close clearance between the ribs and equipment should be avoided.
6. Rib bolts should be installed on cycle using consistent installation patterns for the best protection against rib falls.
7. Employees should always remain alert to changing conditions and report any abnormal roof or rib conditions to mine management.

APPENDIX

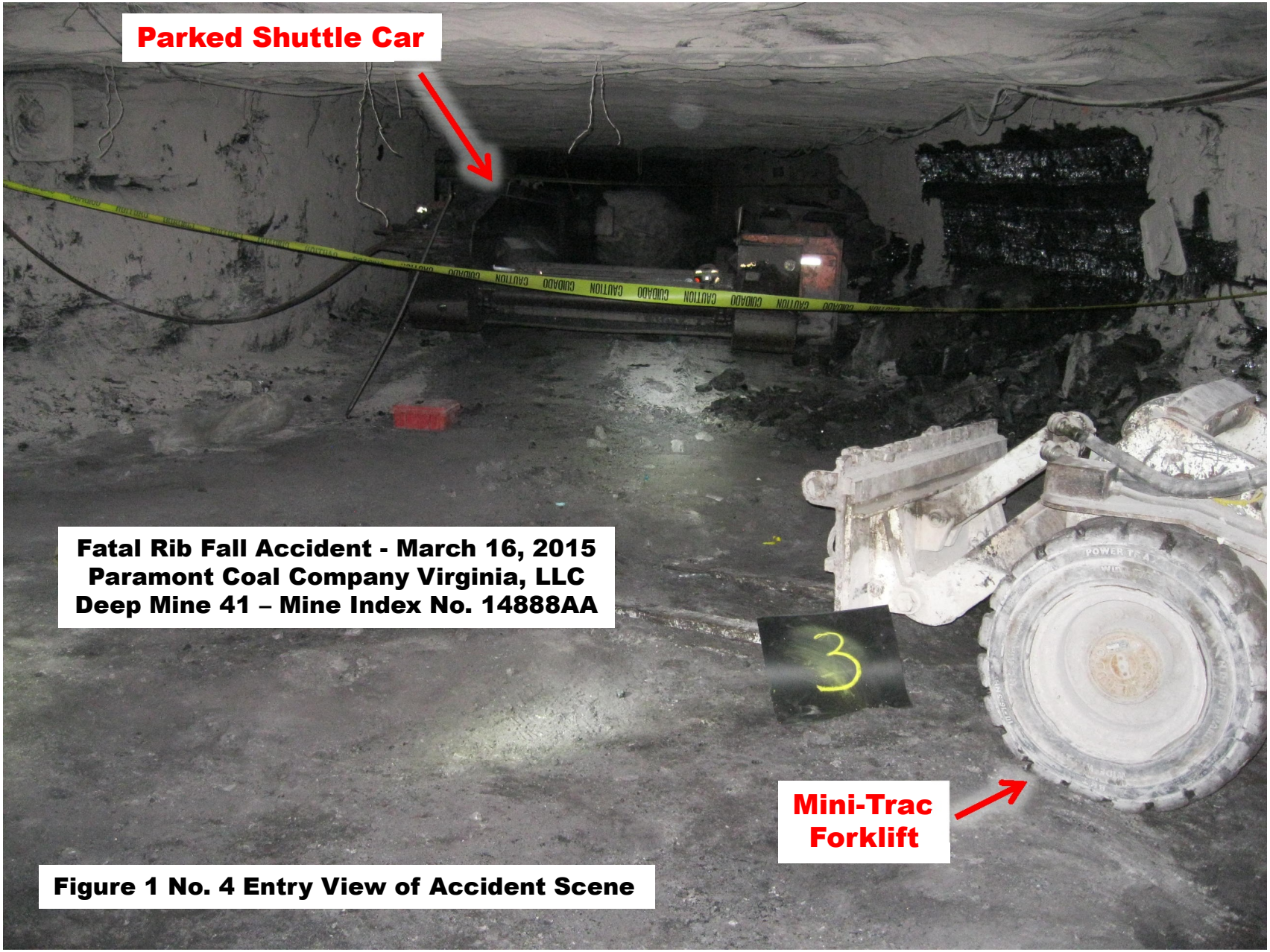


Figure 1 No. 4 Entry View of Accident Scene

Fatal Rib Fall Accident – March 16, 2015
Paramont Coal Company Virginia, LLC
Deep Mine 41 – Mine Index No. 14888AA

Figure 2 Accident Scene
No. 4 Entry Left Crosscut – No. 3 Section

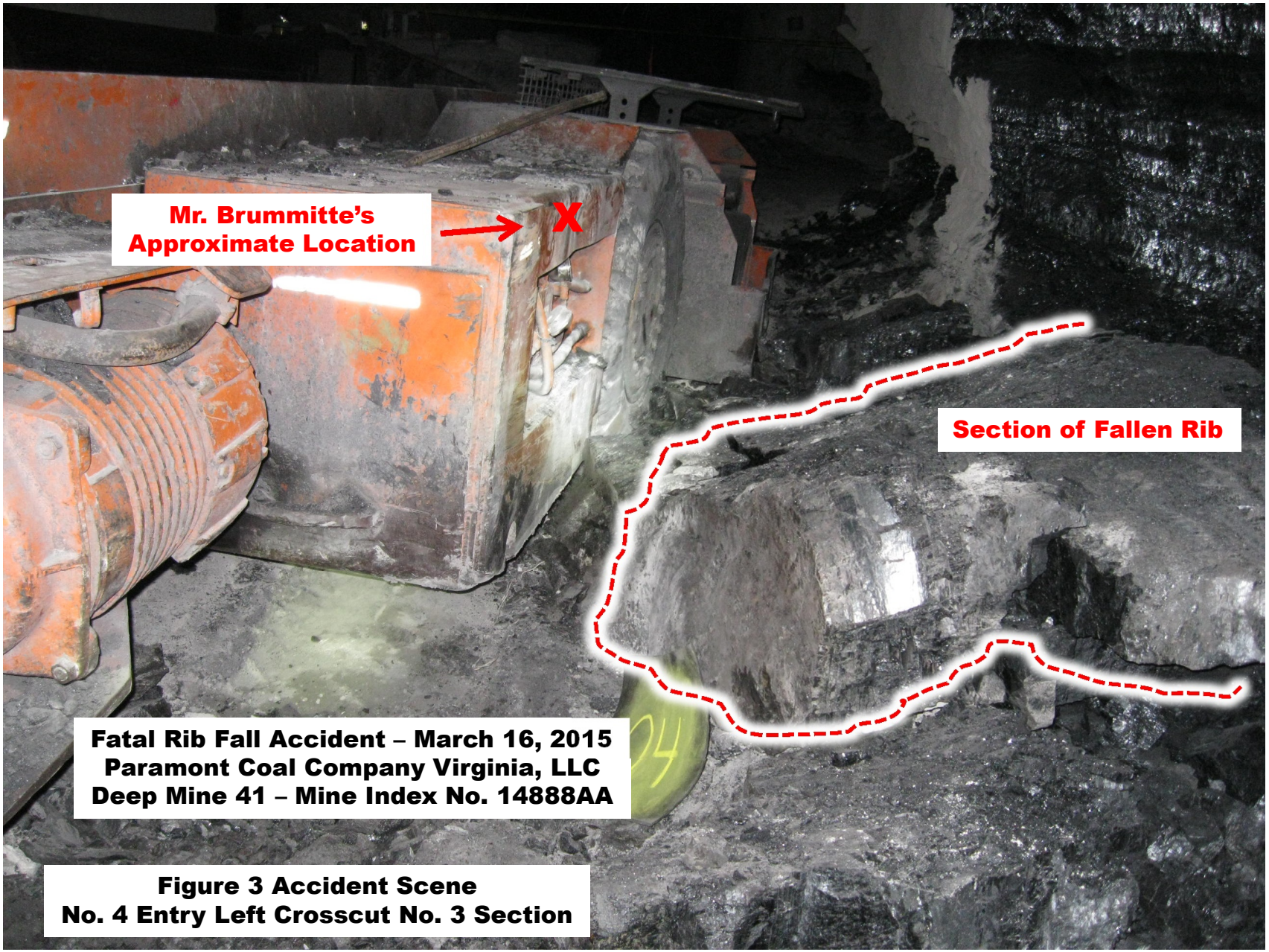


Figure 3 Accident Scene
No. 4 Entry Left Crosscut No. 3 Section


No. 3 Entry
Pillar Line
No. 4 Belt Entry
No. 5 Entry
Approximate Location of Victim
SLATE BAR
SLATE BAR
SLATE BAR
4464
5053
4467
CROSSCUT 14
4450
DMME
Paramont Coal Company Virginia, LLC
Deep Mine 41 – Mine Index No. 14888AA
March 16, 2015
Post Accident Sketch
Fatal Rib Fall
2D Panel
NOT TO SCALE
BROW
RIB FALL
SCOOP
SHUTTLE CAR
MINI-TRAC FORK LIFT

VICTIM DATA SHEET

Name:	David William Brummitte
Occupation:	Temporary Fill-In Section Foreman
Mailing Address:	7730 Big Branch Road Pound, VA 24279
Date of Birth:	April 23, 1980
Married:	Yes - 3 dependents
Total Mining Experience:	10 Years
Experience with Present Company:	2 Years
Employment at Present Occupation:	20 Weeks
Certification History:	First Class Mine Foreman – Issued 10-28-14
	General Coal Miner Underground
	Gas Detection

MINE LICENSE INFORMATION

Official Corporation:	Paramont Coal Company, Virginia, LLC
Official Business Name of Operator:	Paramont Coal Company, Virginia, LLC Deep Mine 41
Person with Overall Responsibility:	Jaime Ratliff, Superintendent
Person in Charge of Health and Safety:	Jaime Ratliff, Superintendent

The following mine personnel provided information and/or were present during the accident investigation:

Paramont Coal Company Virginia, LLC – Deep Mine 41

Jaime Ratliff	Superintendent
Jeffrey A. Cantrell	General Mine Foreman
David Dillon (Maxxim Shared Services, Inc.)	Safety Representative
Joseph E. Rudder, Jr.	Director Regulatory Compliance

Personnel Interviewed During the Accident Investigation

Kenneth Webb	Assistant Shift Mine Foreman	Owl Shift
Michael Shelton	Outby Mine Foreman	Owl Shift
Shannon Strouth	003 Section Production Foreman	Day / Evening Shift
Ronny M. Smith	003 Section Production Foreman	Day / Evening Shift
Donald Cook	003 Maintenance Supervisor	Owl Shift
Glen Sturgil	CO Monitoring System Repairman	Owl Shift
Odell Payne	Maintenance / Electrical Repairman	Owl Shift
Daniel Bowen	Belt Repairman / Outby Labor	Owl Shift
Mike Shell	Belt Repairman / Outby Labor	Owl Shift
Justin Stewart	Roof Bolting Machine Operator	Owl Shift
Jerry Kelly	Scoop Machine Operator	Owl Shift
Billy Mullins	Scoop Machine Operator	Owl Shift

Virginia Department of Mines, Minerals & Energy

M. Randy Moore	Chief, Division of Mines
Chris Whitt	Emergency Response Coordinator
Sammy Fleming	Coal Mine Inspector Supervisor
Hershiel Hayden	Coal Mine Inspector
Kenneth Johnson	Coal Mine Inspector
Terry A. Ratliff	Coal Mine Inspector
William Stevens	Coal Mine Inspector
Glendon Sturgill	Coal Mine Inspector
Rusty Ward	Coal Mine Inspector, Family Liaison

Mine Safety and Health Administration

James A. Kiser	Assistant District Manager (Enforcement)
Benjamin S. Harding	Assistant District Manager (Technical)
Paul E. Smith	Supervisory Mine Safety and Health Inspector
Gary Hall	Supervisory Mine Safety and Health Specialist (Roof Control)
Terry Sheffield	Staff Assistant
James Vadnal	MSHA Technical Support Roof Control Division
Garnie M. Deel	Mine Safety and Health Specialist (Roof Control)
Duane Beggs, P.E.	Engineer
Fred Martin	Educational Field Services
Jason D. Hess	Mine Safety and Health Specialist (Ventilation)
Jessica Reeves	Mine Safety and Health, Family Liaison

SIGNATURE SHEET

This report is hereby submitted by Terry A. Ratliff and approved by Marshall Randy Moore:

Terry A. Ratliff, Division of Mines **Date**

M. Randy Moore, Chief **Date**