West Virginia Office of Miners’ Health, Safety and Training

February 1, 2006

Fatal Rib Fall Investigation Report
Long Branch Energy
Mine No. 18
Permit No. U-143-82

Region Three – Danville Office
137 Peach Court, Suite 2
Danville, West Virginia 25053
Harry Linville, Inspector-at-Large
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= ROOF BOLT WITH HALF HEADER

= ROOF BOLT 8" x 8"

FACE

ROCK

VICTIM

VICTIM STARTED BOLTING HERE

MINE RIB

LINE CURTAIN ROLLED UP

ROOF BOLTER

ROOF BOLTER CABLE

TEST HOLE

REFLECTORS

CANOPY

CONTROL

ATRS

LONG BRANCH ENERGY
P. O. BOX 778
DANVILLE, WV
MINE NO. 18

POWELLTON SHAM
WEAVER, WV
DATE STARTED: 01-14-81 (SLOPER)
ROOKE COUNTY
SCALE: 1" = 10'
CROOK DISTRICT
W. V. DEPT. OF ENERGY ID No. 5-140-02
M.N.M. ID NO. 46-06005
EXTENDED = 2/01/06
Fatal Rib Fall Investigation Report
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GENERAL INFORMATION

A fatal rib fall accident occurred on February 1, 2006 at the Long Branch Energy Mine No. 18. The accident occurred at approximately 12:40 p.m. and resulted in the death of Edmund Vance. The accident occurred on the 4 Left Mains Section. Mr. Vance was 46 years of age and resided at Bim, West Virginia. His wife, Elizabeth G. Vance, survives him along with two dependent sons.

Mr. Vance was operating the right side (off side) of a Fletcher Roof Ranger DDO-13 roof-bolting machine at the time of the accident in the face of the no. 5 entry on the mains section when a section of the right side rib fell pinning him against the bolting machine. Mr. Vance had a total of 26.5 years of mining experience and had been employed at this mine for approximately 2.5 years.

Long Branch Energy superintendent, Phillip Ball at 1:13 p.m. the same day, reported the accident to the Office of Miners’ Health, Safety and Training’s Danville office. Inspector-at-Large, Harry Linville took the call. A joint investigation with the Mine Safety and Health Administration (MSHA) was started immediately.

The mine was originally permitted to commence operation on November 23, 1993 and is located just off Route 85 near Wharton in Boone County. Sixty-one (61) people are employed on 3 shifts. Coal is mined on one underground working unit from the Powellton Seam. Continuous mining machine methods are currently used and the company reported 372,000 tons of coal production in 2005. Personnel and supplies are transported via battery-powered rubber-tired vehicles. The most recent general inspection by the Office of Miners’ Health, Safety and Training was completed on December 12, 2005.

DESCRIPTION

The mains section crew entered the mine on February 1, 2006 at their normal starting time of 6:00 a.m. under the direction of section foreman, Steve Lafferty. Mining started in the 2nd. right entry at approximately 6:40 a.m. The continuous mining machine operator was Worley L. Miller. Roof bolt machine operators, Timmy Vance and Edmund Vance, began the day by bolting the 2nd. right entry. Upon completion of mining in the 2nd. right entry the continuous mining machine was moved to no. 1 while the roof bolters moved to no. 1 after they finished bolting 2nd. right.

The continuous mining machine was eventually moved to the no. 5 entry at approximately 11:50 a.m. Randall Brogan was the continuous mining machine operator in the no. 5 entry at the outset and Worley L. Miller completed the mining. Miller and Brogan stated that they were instructed to reduce the cut depth due to adverse rib conditions. Miller and Brogan mined the no. 5 entry to a depth of approximately 20 feet. Miller also stated that he used the continuous mining machine to scrape the right rib twice during the clean-up phase of the
mining to remove any loose material from the ribs. Miller stated that the ribs looked solid upon completion of mining in the no. 5 entry.

Timmy Vance and Edmund Vance then moved the roof-bolting machine into the no. 5 entry face. Timmy Vance stated that they were told to “watch that place” by Miller. Foreman, Steve Lafferty, had instructed the two bolters to install some spot bolts on the left side of the place as they started bolting. Lafferty and utility man, James Jackson, were immediately outby the bolting machine unloading supplies from a scoop onto the bolting machine.

Timmy Vance stated that they had installed two rows of bolts and were in the process of installing a third row when he saw the rib fall on the right side pinning Edmund Vance against the bolting machine in the area of the operator’s controls. Timmy Vance stated that he heard no noise nor did he notice the rib “flaking” before the rib fell.

Timmy Vance, Lafferty and Jackson went immediately to where Edmund Vance was pinned and began attempting to move the fallen material. After several attempts they were successful in freeing Edmund Vance. Lafferty then went to get first-aid supplies and call outside to request an ambulance. Edmund Vance was placed on a backboard/stretcher and transported to the surface on a rubber-tired battery-powered vehicle. Mine foreman and EMT, Ed Bourne met the vehicle on the way to the surface.

An ambulance dispatched by Eddie Workman was waiting on the surface. Edmund Vance was transported to Boone Memorial Hospital where he was pronounced dead.

**FINDINGS OF FACT**

1. The section of rib that fell striking Mr. Vance measured 13 feet, 7 inches long by 1.5 to 3 feet wide and varied in thickness from 3.5 to 13 inches. The rib fall occurred as Edmund Vance and Timothy Vance were installing the third row of bolts in the no. 5 entry face and pinned Edmund Vance against the right side of the machine near the operating controls.

2. Along with roof bolt machine operator, Timothy Vance, section foreman, Steve Lafferty and scoop operator, James Jackson were also present in the no. 5 entry when the accident occurred. Jackson and Lafferty were immediately outby and were loading supplies onto the back of the roof-bolting machine.

3. The mining height at the accident site in the no. 5 entry varied from 8 to 8.5 feet.

4. The roof bolting machine used by Edmund Vance and at the time of the accident was a DDO-13 Fletcher.

5. The 4 Left Mains Section had been bolted with 4-foot resin roof bolts.

6. Continuous mining machine operator Worley L. Miller and section foreman, Steve Lafferty, stated that the cut depth in the no. 5 entry had been reduced to approximately 20 feet. Cut depths had frequently been reduced from the maximum depth of 40 feet allowed by the mine’s approved roof control plan due to adverse rib conditions.
7. A total of 13 people were interviewed during this investigation. The consensus among them was that the rib conditions on the mains section were unpredictable and changed quickly and often.

8. Additional rib supports such as rib boards, metal straps, timbers, angled bolts, and/or mesh screening were not being installed as mining progressed as specified in the mine’s approved roof control plan.

CONCLUSION

The physical evidence at the accident site indicated that loose ribs were present in the active working area of the no. 5 entry. Sloughing was present on both the left and right ribs.

ENFORCEMENT ACTION

A non-assessed control order was issued in accordance with Chapter 22A, Article 2, Section 68 of the West Virginia Code for purposes of preserving evidence following the accident.

A total of four (4) notices of violation were issued during this investigation. One (1) was considered to have contributed to this occurrence. Copies of all notices of violation are attached to this report. The contributing notice of violation is as follows:

The approved roof control plan was not complied with on the No. 4 Left Mains Section in that: loose ribs encountered in the no. 5 entry are not being supported by rib boards, metal straps or plates, or timbers, or angled bolts, or mats or mesh as referred to in the approved roof control plan on page 5, section 24.

RECOMMENDATIONS

1. A rib bolting/support plan as mentioned by the approved roof control plan will be implemented to support the ribs.

2. The operator will obtain a walk-thru type bolting machine to facilitate installation of rib bolts and better protect machine operators.
ACKNOWLEDGMENT

The Office of Miners’ Health, Safety and Training gratefully acknowledges the cooperation of the employees and management of Long Branch Energy, the United Mine Workers of America, and the Mine Safety and Health Administration during this investigation.

______________________________  Date
Terry Farley, Health & Safety Administrator

______________________________  Date
Harry Linville, Inspector-at-Large

______________________________  Date
Larry McKnight, Roof Control Inspector

______________________________  Date
Andrew Sparks, District Inspector
APPENDIX

• Mine Information Sheet
• Victim Information Sheet
• Persons Present During Investigation
• Attachment
MINE INFORMATION

COMPANY Long Branch Energy

MINE NAME No. 18

WV PERMIT U-143-82 MSHA PERMIT NO. 46-08305

ADDRESS P. O. Box 776 Danville, WV 25053

COUNTY Boone PHONE NO. 304-247-6801

DATE PERMIT ISSUED November 1993

WORKING STATUS Active

LOCATION Rt. 85 at Wharton, WV

UNION X NON-UNION

DAILY PRODUCTION 2043 tons ANNUAL PRODUCTION TO DATE 51,081 tons

TOTAL EMPLOYEES 61

NUMBER OF SHIFTS 3

COAL SEAM NAME AND THICKNESS Powellton, 6 to 9 feet

ACCIDENT INCIDENT RATE 14.76 LOST TIME ACCIDENTS 2

TYPE OF HAULAGE Shuttle Car

WVOMHST INSPECTOR Andrew Sparks

DATE OF LAST INSPECTION January 12, 2006

NOTIFIED BY Phillip Ball

NOTIFICATION TIME 1:15 p.m., February 1, 2006

CMSP – ANNIVERSARY DATE September 27, 2006

CMSP – CONTACT PERSON Phillip Ball
INVESTIGATION

The following persons participated in the initial investigation conducted on February 1, 2006.

LONG BRANCH ENERGY

Greg Patterson      President
Phillip Ball      Mine Superintendent
Seebert Cook      Evening Shift Mine Foreman, B Crew

UNITED MINE WORKERS OF AMERICA

Joe Carter      Vice President, District 17
Ray Bennett      Safety Committee
Roger Green      Mine Committee

MINE SAFETY AND HEALTH ADMINISTRATION

Jessie Cole      District 4 Manager
Luther Mars      Assistant District Manager
Terry Price      Supervisor
Jerry Cook      Accident Investigator
Charlie Cline      Roof Control Inspector
Clyde Gray      Coal Mine Inspector
Bobby Moreland      Coal Mine Inspector
Doug Johnson

OFFICE OF MINERS’ HEALTH, SAFETY AND TRAINING

Terry Farley      Health & Safety Administrator
Harry Linville      Inspector-at-Large
Larry McKnight      Roof Control Inspector
Andrew Sparks      District Inspector
Harrison Stollings      District Inspector
Willie Barker      Safety Instructor

INVESTIGATION

The following persons participated in the follow-up investigation on February 2, 2006.

LONG BRANCH ENERGY

Elmer C. Bourne      Mine Foreman
Eddie Halstead      Assistant Mine Foreman
UNITED MINE WORKERS OF AMERICA

Joe Carter      Vice President District 17
Ray Bennett      Mine Safety Committee

P. & A. ENGINEERS AND CONSULTANTS

Shelly R. Bowling     Supervisor
Ernest Banks      Rodman
Terry Weaver      Surveyor
Richard Williams      Surveyor
Glen Jarvis III      Transit man, Sketch artist

MINE SAFETY AND HEALTH ADMINISTRATION

Mike Gauna      Technical Support
Charlie Cline      Roof Control Inspector

OFFICE OF MINERS’ HEALTH, SAFETY AND TRAINING

Andrew Sparks     District Inspector

INTERVIEWS

The following persons were present during interviews conducted on February 2, 2006.

LONG BRANCH ENERGY

Greg Patterson      President
Steve Lafferty *     Foreman
James Jackson *     Unitrac Operator
Gary Mullins *      Unitrac Operator
Roger Green *      Outby Unitrac Operator
Randall Brogan *     Continuous Miner Operator
Worley Miller *     Continuous Miner Operator
Jackson Kelly     Attorney
Julia Shreve     Attorney
John Mairs     Attorney
* Denotes those interviewed

UNITED MINE WORKERS OF AMERICA

Gary Young      International Representative
Denny Breedlove     International Representative
INTERVIEWS

The following persons were present during interviews conducted on February 3, 2006.

LONG BRANCH ENERGY

Greg Patterson      President
William Bourne *     Foreman
Denny Lilly *        Roof Bolter Operator
Steve Scott *        Roof Bolter Operator
Harvey Williams *    Roof Bolter Operator
David Tolee *       Unitrac Operator
Bobby Vickers *     Unitrac Operator
Jackson Kelly       Attorney
Julia Shreve        Attorney
John Mairs          Attorney
* Denotes those interviewed

MINE SAFETY AND HEALTH ADMINISTRATION

Terry Price      Supervisor
Jerry Cook      Accident Investigator
Doug Johnson      Coal Mine Inspector
Bobby Moreland     Coal Mine Inspector

OFFICE OF MINERS’ HEALTH, SAFETY AND TRAINING

Harry Linville      Inspector-at-Large
Larry McKnight     Roof Control Inspector
Andrew Sparks     District Inspector
INVESTIGATION

The following persons participated in the follow-up investigation on February 4, 2006.

LONG BRANCH ENERGY

Greg Patterson      President
Phillip Ball      Superintendent

MINE SAFETY AND HEALTH ADMINISTRATION

Jerry Cook      Accident Investigator
Doug Johnson      Coal Mine Inspector

OFFICE OF MINERS’ HEALTH, SAFETY AND TRAINING

Harry Linville      Inspector-at-Large
Larry McKnight      Roof Control Inspector
Andrew Sparks      District Inspector