

West Virginia Office of Miners' Health, Safety & Training

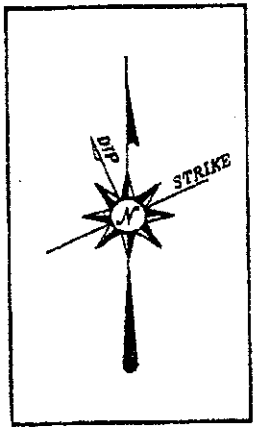
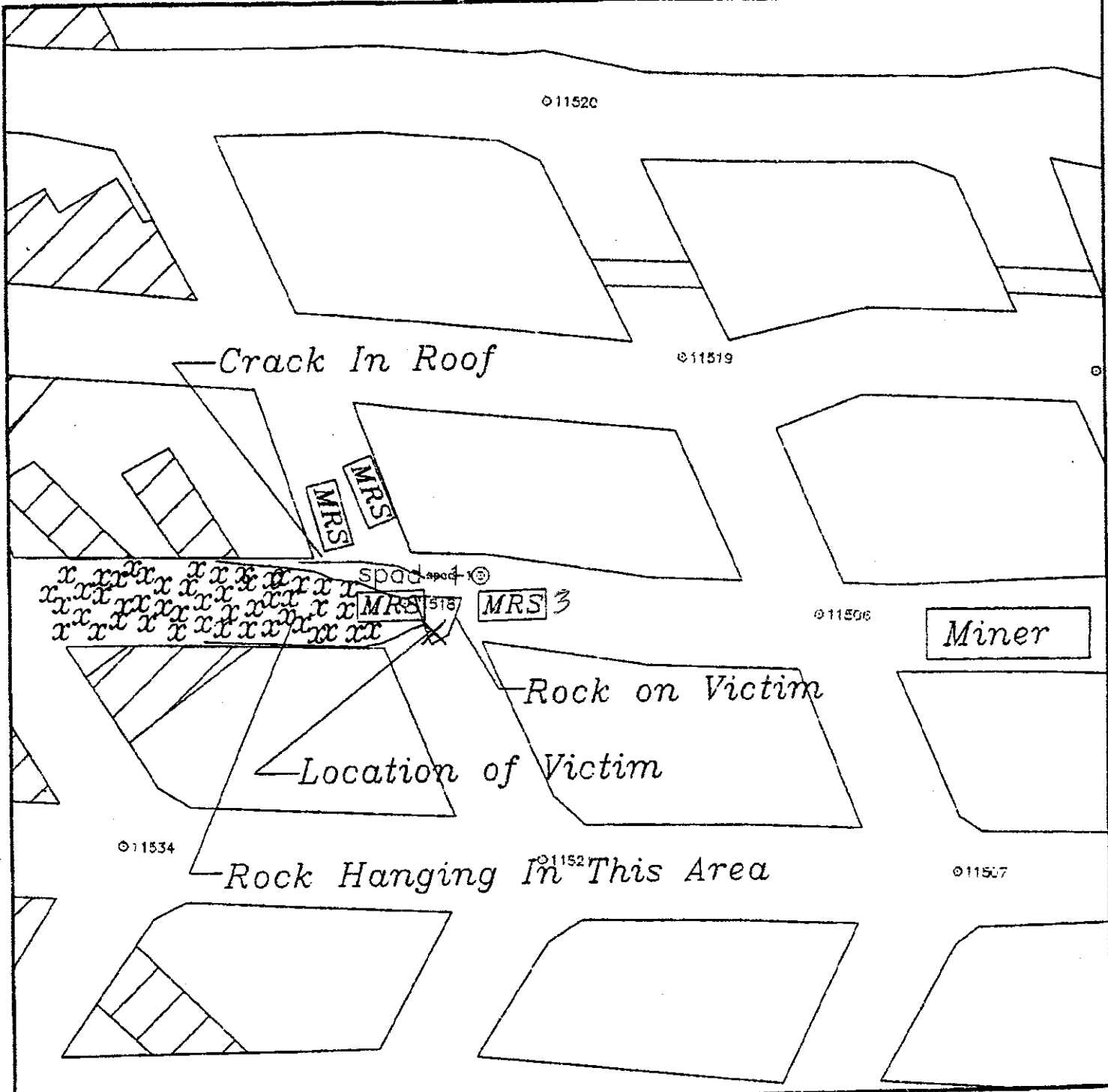
December 27, 2002

Fatal Roof Fall Investigation Report
Mystic Energy, Inc.
Candice No. 2 Mine
Permit No. U-5007-93

Region Three – Danville Office
425 Lick Creek Road
Danville, WV 25053
Harry Linville, Inspector-at-Large

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DRAWING OF FATALITY
ON 4 LT - 3 NORTH SECTION
 Date: 12-27-02
 Time: 6:30 PM

TIMOTHY Z. BOWER
 REGISTERED
 11087
 STATE OF
 ENGINEER

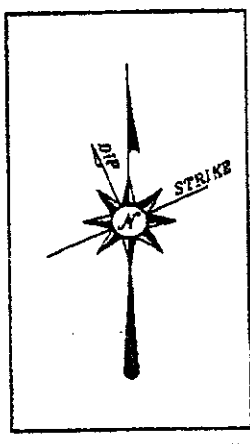
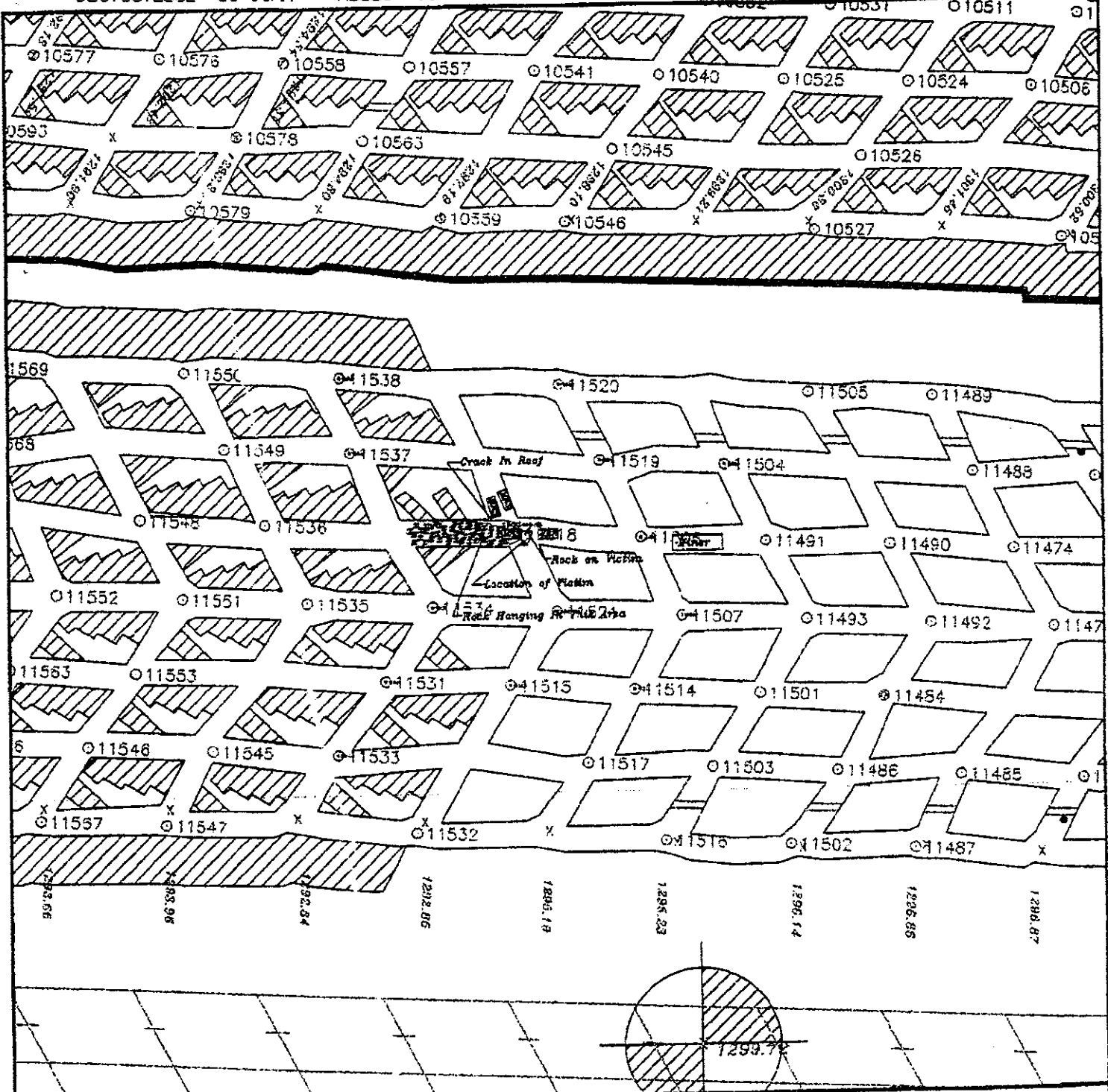
I, the undersigned, hereby certify that this drawing was prepared by me or under my direct supervision and to the best of my knowledge and belief, required by the laws of this State, and covers the period mentioned in the title.

Timothy Z. Bower
 ENGINEER P. E. No. 11087

MYSTIC ENERGY, INC.
 P.O. BOX 177
 WHARTON, WV. 25208
CANDICE 2 MINE

LOWER WINIFREDE SEAM
 DATE STARTED: 9/19/94
 SCALE: 1" = 30'
 N. V. DEPT. OF ENERGY ID No. U-5007-93
 M.S.H.A. ID NO. 46-08429

WHARTON, WV
 BOONE COUNTY
 CROOK DISTRICT
 EXTENDED = 12-27-02



DRAWING OF FATALITY
ON 4 LT - 3 NORTH SECTION
 Date: 12-27-02
 Time: 6:30 PM

TIMOTHY Z. BOWER
 REGISTERED
 11087

I, the undersigned, hereby certify that this map is correct and shows all information in the best of my knowledge and belief, required by law to be shown on this State, and cover the period ending...

Timothy Z. Bower
 ENGINEER

MYSTIC ENERGY, INC.

P.O. BOX 177
 WHARTON, WV. 25208
CANDICE 2 MINE

LOWER WINIPREDE SEAM WHARTON, WV
 DATE STARTED: 9/18/94 BOONE COUNTY
 SCALE: 1" = 100' CROOK DISTRICT
 W. V. DEPT. OF ENERGY ID No. U-5007-93
 M.S.H.A. ID No. 46-08429 EXTENDED = 12-17-02

Fatal Roof Fall Investigation Report
Mystic Energy, Inc.
Candice No. 2 Mine
Permit No. U-5007-93

General Information

A fatal roof fall accident occurred at approximately 6:20 p.m. on December 27, 2002 at the Mystic Energy, Inc., Candice No. 2 mine. The accident occurred on the No. 3 Left North Section where retreat mining (pillaring) was being conducted. Sidney D. Green, age 51, from Beaver, W. V. was fatally injured by a roof fall which occurred as mobile roof supports were being moved in the no. 5 entry after a final push-out had been mined. Mr. Green was apparently positioned between two mobile roof supports operated by Bert Gravely and Jerry C. Bonds, who was also seriously injured by the roof fall. Mr. Green had a total of 20 years mining experience and had been employed at this mine for eight years.

Harry Linville, Inspector-at-Large with the Office of Miners' Health, Safety and Training's Danville office was notified of the accident by Mystic Energy Inc.'s superintendent, Steve Houchins, at approximately 8 p.m. on December 27, 2002. A joint investigation with the Mine Safety and Health Administration (MSHA) was started immediately.

The Mystic Energy Inc., Candice No. 2 mine is a drift-mine which produces coal from the Lower Winifrede seam. The mine is located in Boone County near Wharton, WV and was permitted to commence operation on September 21, 1994. Two underground units are currently in operation. Both units are engaged in retreat mining (pillaring) and are utilizing Mobile Roof Supports (MRS) and Continuous Haulage Systems. Coal is transported to the surface by conveyor belt, and the average mining height is approximately sixty (60) inches. Supplies and personnel are transported by rail and rubber tired vehicles. The last regular inspection by the OMHST was completed on December 16, 2002.

Description

On Friday, December 27, 2002 the no. 3 Left North Section crew, under the direction of section foreman, John M. Shirkey, entered the mine at their normal starting time of 2:30 p.m. After arriving on the section, retreat mining (pillaring) started in the no. 7 entry at approximately 3:15 p.m. Mining then continued in the no. 6 entry, after completion in no. 7 Entry. Upon completion of mining in the no. 6 entry, mining started in the no. 5 entry at approximately 5:40 p.m., according to Shirkey. After pointing out a crack in the roof in the no. 5 entry to mobile roof support (MRS) operator Bert Gravely, Shirkey, section foreman, went to assist in preparations for the next conveyor belt over in the no. 4 entry. Jerry Bonds was

also operating the mobile roof supports. Ronald Steele was operating the continuous mining machine.

According to Steele, pillar lifts were mined to the right, left and right again before finishing with a push-out on the right side in the no. 5 entry. When mining concluded in the no. 5 entry, the mobile bridge conveyors were moved outby through the last open crosscut between no. 4 and no. 5 entry, and the continuous mining machine was moved outby in the no. 5 entry.

According to mobile roof support operators, Jerry Bonds and Bert Gravely, the mobile roof support units had been located and set as required by the roof control plan for push-out mining (see mirror image of drawing no. 10, page 23, approved roof control plan). Mobile roof support unit no. 1 was set on the left side and mobile roof support unit no. 3 was set on the right side of the no. 5 entry, inby the last open crosscut. Mobile roof support unit no. 2 was set on the inby side of the crosscut and mobile roof support unit no. 4 was set on the outby side of the crosscut to the right off the no. 5 entry.

Bonds and Gravely stated that they attempted to move the no. 2 mobile roof support unit first. Bonds states that the radio remote control device he was using malfunctioned, in that, two of the cylinder jacks on the front of mobile roof support unit depressurized while the two cylinder jacks on the rear of the mobile roof support unit did not depressurize. This caused the two front cylinder jacks to pull out of their mounting brackets. (Note: There is a difference of testimony given on this issue. Bonds indicates that the two front jacks on the no. 2 mobile roof support unit were out of their brackets, while Bert Gravely indicates that the two rear jacks were out of their brackets. The mobile roof support unit could not be examined during the on-site investigation.) Bonds states that the no. 3 mobile roof support unit was then moved a short distance outby in front of the no. 2 unit. Gravely stated that he then stepped on the inby side of the no. 2 unit because the cylinder jacks had popped out of their slots. Gravely stated that he attempted to push the cylinder jacks back into their slots but was unsuccessful. Bonds then moved the no. 1 unit outby to the location where it was eventually found after the accident. Gravely then moved the no. 3 unit outby the no. 1 unit in the no. 5 entry to the location where it was eventually found after the accident.

Bonds stated that mobile bridge operator, Sidney Green came to the site at about this time. Bonds was located on the left side of the no. 5 entry at a point approximately between the no. 3 and no. 1 mobile roof support units. Bonds stated that Green walked past him in the inby direction and the roof fall came without warning a moment or so later. (see drawing indicating Green's location). Bonds also stated that he was facing in the outby direction and was covered from approximately the waist down by the roof fall. Gravely was located on the right side of the no. 5 entry while Ronald Steele was a short distance outby the no. 3 mobile roof support unit in the no. 5 entry. Both men went to assist Bonds after the roof fall and were able to quickly extract him from under the fallen material.

The section crew then began the task of removing Mr. Green from under the fallen material. Timbers were set in the connecting crosscut between no. 4

entry and no. 5 entry to approach the fall area. When supports had been set to reach Mr. Green, checks for vital signs were made but none were detected. With the assistance of a lifting jack and blocking material, they were able to lift the rock enough to extract Mr. Green. Mr. Green was then transported to the surface of the mine where emergency personnel were waiting. The Boone County Ambulance Authority transported Mr. Green to the Medical Examiner in Charleston, WV. Mr. Green was pronounced dead by the Coroner's Office.

FINDINGS OF FACT

1. The victim was struck by a fall of roof while attempting to assist in the moving of mobile roof supports from a final pushout in the no. 5 entry.
2. The mining height at the accident scene was measured to be 67 inches.
3. The mobile roof supports being utilized were manufactured by Fletcher.
4. Full pillar extraction was being conducted on the 3 Left North Section.
5. At the time of the accident, only the no. 4 mobile roof support unit was pressurized against the mine roof.
6. The mobile roof supports were not being moved in accordance with the approved roof control plan.
7. At least three individuals were in the active pillar workings while tramming the mobile roof supports from a final pushout.
8. The victim was located between the no. 1 and the no. 3 mobile roof support at the time of the accident.
9. Those involved in the recovery indicated that the victim was completely covered by the fallen material with the exception of one forearm.

CONCLUSION

The evidence at the accident scene clearly indicated that the victim was located between the no. 1 and no. 3 mobile roof supports while the supports were being trammed from the pillar workings. Only the no. 4 mobile roof support was pressurized against the mine roof at the time the fall occurred.

ENFORCEMENT ACTION

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

A total of six (6) notices of violation were issued during this investigation. Three (3) were considered to have contributed to the accident and are listed below. Also issued were two (2) Individual Personal Assessments.

Chapter 22A, Article 2, Section 25(a). After a fatal accident occurred on December 27, 2002 at this mine it was determined by an on site investigation and thru interviews conducted that the state approved roof control plan was not being complied with at this mine, in that, the number one and number three mobile roof supports located in the number five entry active pillar workings on the active three left North Section were being lowered and moved at the same time which is in violation of page twenty-one, safety precaution number five of the approved plan.

Chapter 22A, Article 2, Section 25(a). The state approved roof control plan was not being complied with at this mine, in that, after a fatal accident occurred on December 27, 2002 on the active three left North Section in number five entry active pillar workings, it was determined by interviews conducted and on an on-site investigation that the number one and number three mobile roof supports were being moved independent of each other instead of in pairs as required on page twenty-one, safety precaution number six of the approved plan.

Chapter 22A, Article 2, Section 25(a). A fatal accident occurred at this mine on December 27, 2002, during an onsite investigation, interviews and physical evidence at the accident scene revealed that personnel did not stay clear of the mobile roof supports while they were in the lowered position in the active pillar workings of the number five entry on the active three left North Section as stated and required by the approved Roof Control Plan, page twenty-one, safety precaution number seven.

RECOMMENDATIONS

Mystic Energy, Inc. will retrain all Candice No. 2 Mine employees on the mine's roof control plan, specifically, all aspects of retreat mining with special emphasis on utilization of the mobile roof supports.

ACKNOWLEDGEMENT

The West Virginia Office of Miners' Health, Safety and Training gratefully acknowledges the cooperation of the employees and management of Mystic Energy, Inc., United Mine Workers' of America and the Mine Safety and Health Administration during this investigation.

Respectfully submitted:

Terry Farley, Health & Safety Administrator Date

Harry Linville, Inspector-at-Large Date

Larry McKnight, District Inspector Date

John Kinder, District Inspector Date

Steve Cox, Safety Instructor Date

APPENDIX

- Mine Information Sheet
- Victim Information Sheet
- Persons Present During Investigation
- Page 21 of the Approved Roof Control Plan
- Page 23 of the Approved Roof Control Plan

MINE INFORMATION

COMPANY Mystic Energy, Inc.

MINE NAME Candice No. 2

WV PERMIT U-5007-93

ADDRESS P. O. Box 177 Wharton, WV 25208

COUNTY Boone

DATE PERMIT ISSUED September 21, 1994

WORKING STATUS Active

LOCATION Cow Creek near Wharton, WV

UNION X NON-UNION

DAILY PRODUCTION 35,163 tons ANNUAL PRODUCTION 805,242 tons

TOTAL EMPLOYEES 70

NUMBER OF SHIFTS 3

COAL SEAM NAME AND THICKNESS 67 inches, Lower Winifrede

ACCIDENT INCIDENT RATE 4.33 LOST TIME ACCIDENTS 2

TYPE OF HAULAGE Stamler continuous haulage system

WOMHST INSPECTOR Johnny Kinder

DATE OF LAST INSPECTION December 16, 2002

NOTIFIED BY Steve Houchins

NOTIFICATION TIME 8:00 p.m. December 27, 2002

CMSP – ANNIVERSARY DATE October 4, 2003

CMSP – CONTACT PERSON Burge Speilman

VICTIM INFORMATION

NAME Sidney D. Green

ADDRESS 506 Seymore Court Beaver, WV 25813

TELEPHONE NO. (304)253-8592 AGE 52 Social Security No. [REDACTED]-1061

TOTAL MINING EXPERIENCE 20 plus years

EXPERIENCE AT THIS MINE 8 years

AVERAGE NUMBER OF DAYS WORKED PER WEEK 6

AVERAGE NO. OF HOURS WORKED PER WK. 54 PER DAY 9

LENGTH OF SHIFTS AT THIS MINE 9 hrs.

TRAVEL TIME TO/FROM WORK 2.33 hrs.

OCCUPATION AT TIME OF ACCIDENT Bridge Operator

REGULAR OCCUPATION Bridge Operator

COAL MINER'S CERTIFICATION P-4628

OTHER CERTIFICATIONS 30601 (Underground Mine Foreman)

SPOUSE'S NAME Lorraine Green

DEPENDENTS One

DATE OF ACCIDENT: 27th DAY OF December, 2002 AT 6:20 p.m.

CAUSE OF ACCIDENT Fall of roof rock

DATE OF DEATH: 27TH DAY OF December, 2002

INVESTIGATION

The following persons participated in the onsite investigation conducted on December 27, 2002.

MYSTIC ENERGY, INC.

Steve Houchins	Mine Superintendent
Mike Bailey	Mine Foreman
Doug Smith	Chief Electrician
Burge Speilman	Safety Consultant

UNITED MINE WORKERS OF AMERICA

Michael Baldwin	International Safety Representative
J. R. Blevins	International Safety Representative
Freddie Maynard	International Safety Representative
Wendell Rollins	Safety Committeeman

MINE SAFETY AND HEALTH ADMINISTRATION

Terry Price	Supervisor
Jerry Richards	Roof Control Specialist
Bobby Moreland	Accident Investigator
Jackson Nunnery	Coal Mine Inspector
Sharon Cook	Educational Field Services

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

Terry Farley	Health & Safety Administrator
Harry Linville	Inspector-at-Large
Larry McKnight	District Inspector
Steve Cox	Safety Instructor

The following persons participated in the follow-up investigation on December 28, 2002.

MYSTIC ENERGY, INC.

Steve Houchins	Mine Superintendent
Chris Matkins	Engineer
Doug Smith	Chief Electrician
Kenny Vance	Section Foreman
Doug Williams, Jr.	Safety Manager

MINE SAFETY AND HEALTH ADMINISTRATION

Bobby Moreland	Accident Investigator
William Williams	Tech Support
John Cook	Tech Support
Jackson Nunnery	Coal Mine Inspector

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

William E. Bentley	Roof Control Inspector
Larry McKnight	District Inspector

INTERVIEWS

The following persons were present during the interviews conducted on December 30, 2002.

MYSTIC ENERGY, INC.

John Shirkey *	Section Supervisor
Bert Gravely*	Mobile Roof Support Operator
Doug Williams, Jr.	Safety Manager
Burge Speilman	Safety Consultant
Dave Hardy	Attorney

UNITED MINE WORKERS OF AMERICA

Rick Glover	International Safety Representative
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MINE SAFETY AND HEALTH ADMINISTRATION

Terry Price	Supervisor
Jim Beha	Staff Assistant
Jerry Richards	Roof Control Specialist
Bobby Moreland	Accident Investigator
William Williams	Tech Support
John Cook	Tech Support
Sharon Cook	Education Field Services

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

Doug Conaway	Director
Terry Farley	Health & Safety Administrator
Harry Linville	Inspector-at-Large
Larry McKnight	District Inspector
Steve Cox	Safety Instructor

The following persons were present during the interviews conducted on December 31, 2002.

MYSTIC ENERGY, INC.

Steve Houchins*	Superintendent
Fred Houchins*	Mine Foreman
John Shirkey *	Section Supervisor
James Asbury*	Mobile Roof Support Operator
Ronald Kidd*	Mobile Roof Support Operator
Ronald Steele*	Continuous Miner Operator
Doug Williams, Jr.	Safety Manager
Burge Speilman	Safety Consultant
Dave Hardy	Attorney

UNITED MINE WORKERS OF AMERICA

Rick Glover	International Safety Representative
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MINE SAFETY AND HEALTH ADMINISTRATION

Jim Beha	Staff Assistant
Bobby Moreland	Accident Investigator
Jerry Richards	Roof Control Specialist
Sharon Cook	Educational Field Services

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

Terry Farley	Health & Safety Administrator
Harry Linville	Inspector-at-Large
William E. Bentley	Roof Control Inspector
John Kinder	District Inspector
Steve Cox	Safety Instructor

The following persons were present during the interview conducted on January 21, 2002.

MYSTIC ENERGY, INC.

Jerry C. Bonds*	Mobile Roof Support Operator
Doug Williams, Jr.	Safety Manager
Burge Speilman	Safety Consultant
Dave Hardy	Attorney

MINE SAFETY AND HEALTH ADMINISTRATION

Bobby Moreland
Jerry Richards

Accident Investigator
Roof Control Specialist

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

Terry Farley
John Kinder
Steve Cox

Health & Safety Administrator
District Inspector
Safety Instructor

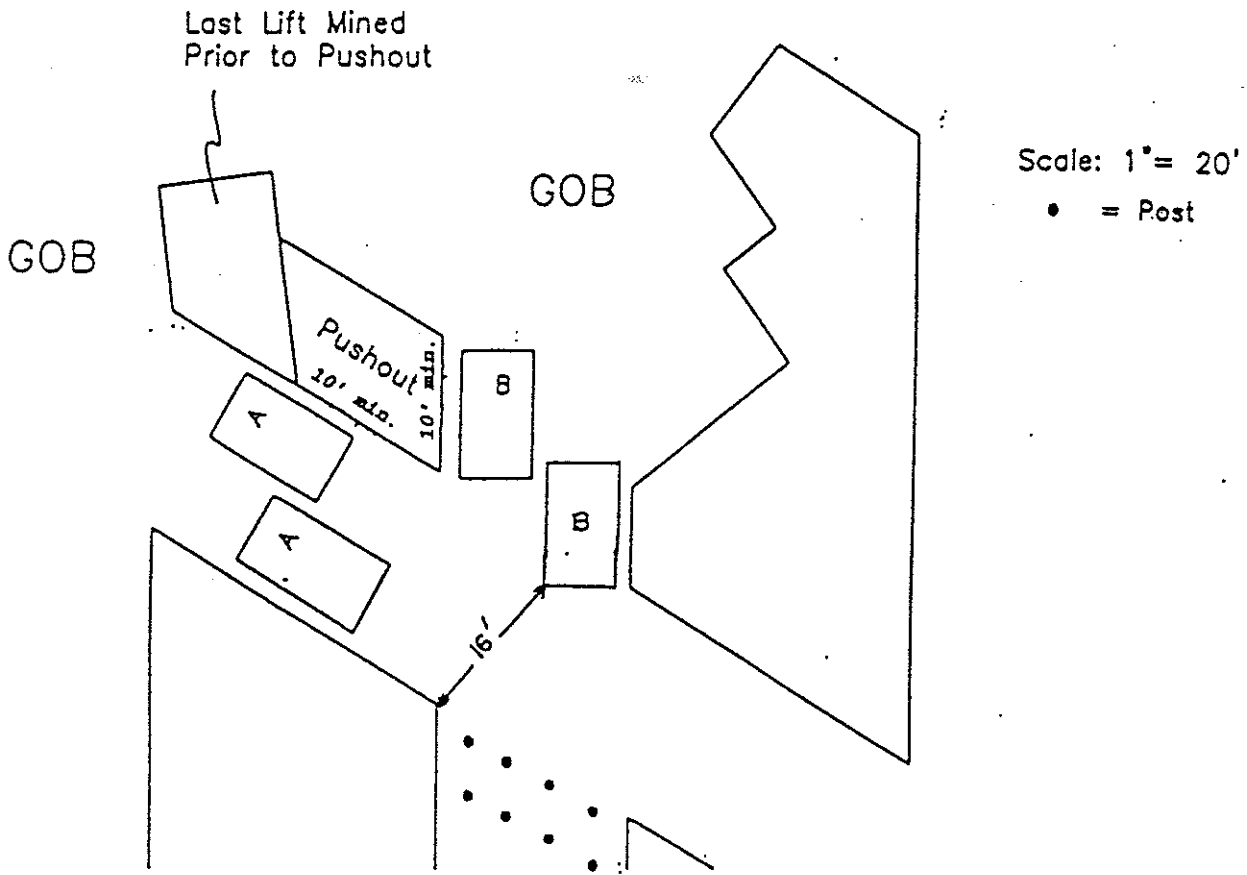
* Denotes those interviewed.

SAFETY PRECAUTIONS FOR MOBILE ROOF SUPPORTS (MRS)

1. Manual operation of the Fletcher MRS and Voest Alpine ABLs units is intended for maintenance purposes only. If the unit is set against the mine roof, adequate temporary roof supports shall be installed prior to lowering the unit manually.
2. The Voest Alpine ABLs units are equipped with an umbilical cord that allows remote trimming. This is not considered a manual operation.
3. When possible, maintenance shall be performed in areas that have been permanently supported.
4. All four MRS units shall be operational and present at the section during the extraction of the pillars.
5. Never shall more than one (1) unit at a time be lowered and moved when the units are in the active pillaring area. Under load created by the roof strata.
6. In the active pillaring area, the units shall be operated in pairs, and when moving, each unit shall be offset not more than one half the length of the companion unit.
7. All personnel shall stay clear of the units when the shields are raised and lowered.
8. Operators shall observe the pressure gauges and cease pillaring operations when the yielding pressure is reached.
9. Cable hangers will not be recovered in by the pillar line. Break-away type hangers will be used in the pillar line.
10. MRS units will be pressurized against the roof ONLY on the active pillar line.

DRAWING NO. 10

Pillar Recovery
Deep-Cut Mining Using Mobile
Roof Supports



1. MRS's set A and B shall be installed to limit the width of the roadway into the pushout to sixteen feet.
2. Breaker posts shall be installed prior to mining the pushout to limit the approach to the pushout to one roadway. The roadway leading to the pushout can be from the entry, crosscut, or room.
3. Pushouts shall be mined only when two (2) pairs of MRS's are used.
4. After completing the pushout the MRS's may be used to knock breaker posts set in the crosscut to allow movement across the pillar line. Breaker post or MRS's will be promptly set after movement of equipment is completed.