# Report of Fatal Accident
# Auger Accident
# Surface Coal Mine
# October 17, 2018

Princess Polly Anna & JCT Enterprises
No. 1 Surface Mine
Permit Number S00300212

Region IV Office
550 Industrial Drive
Oak Hill, West Virginia 25901
McKennis P. Browning, Inspector-at-Large

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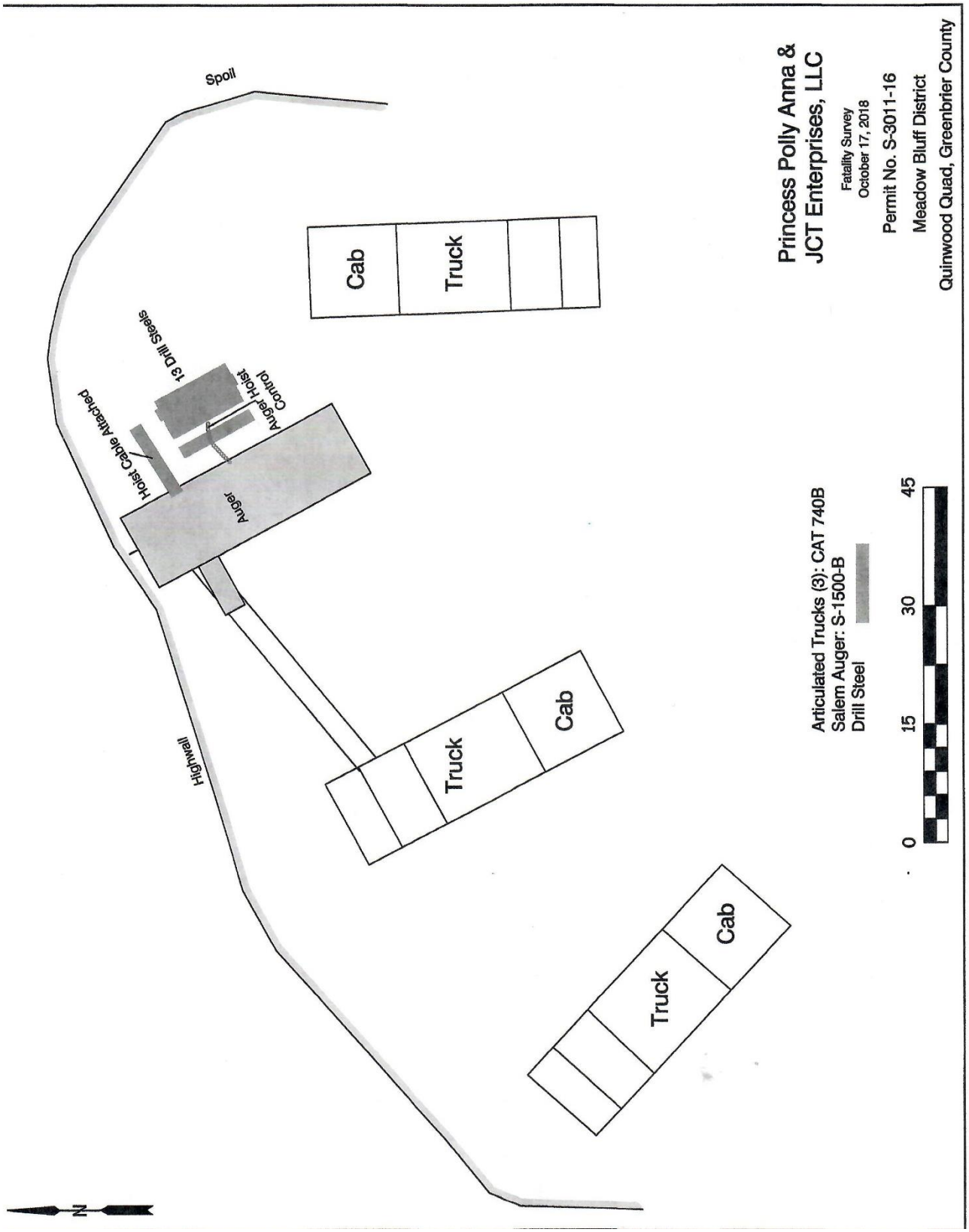
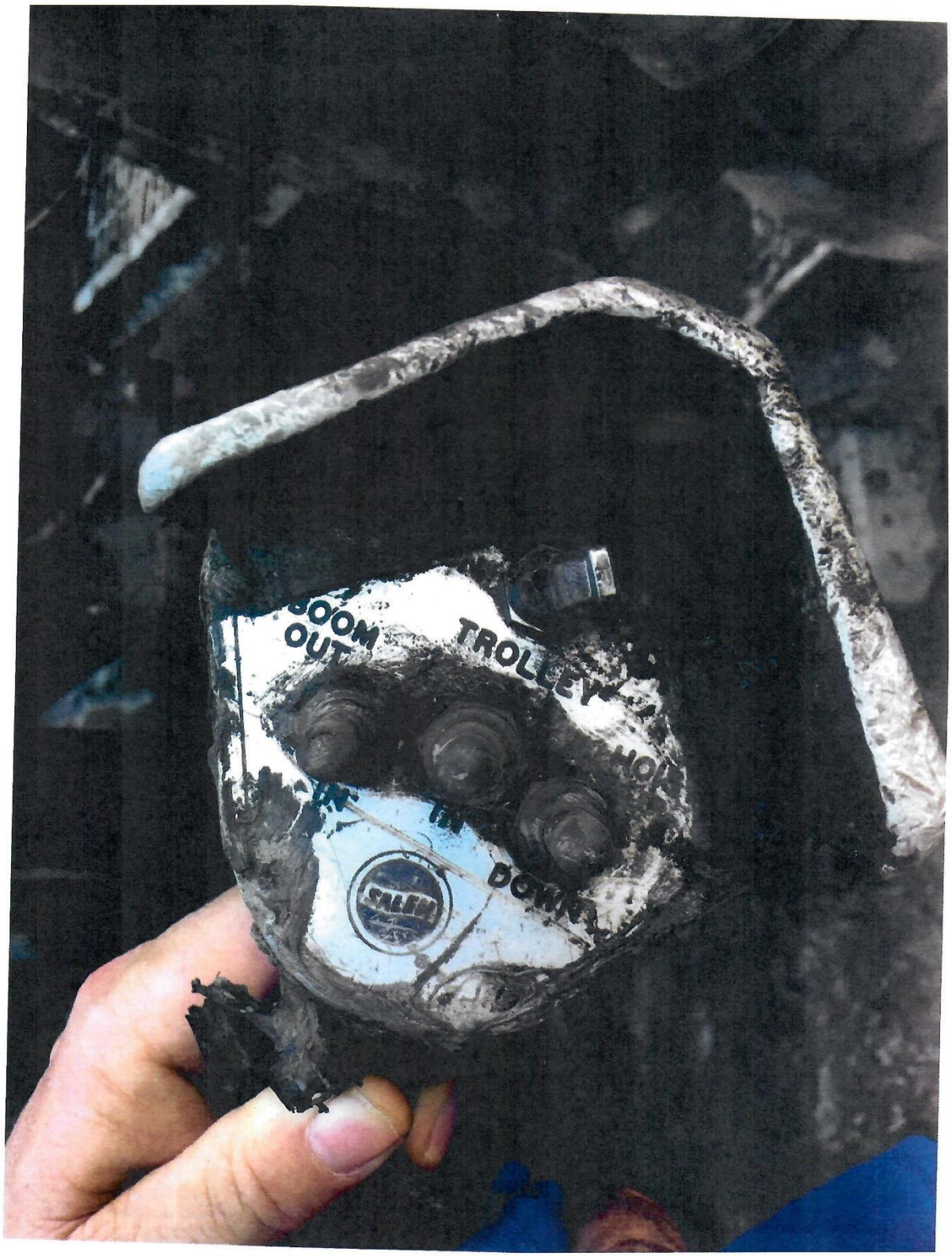
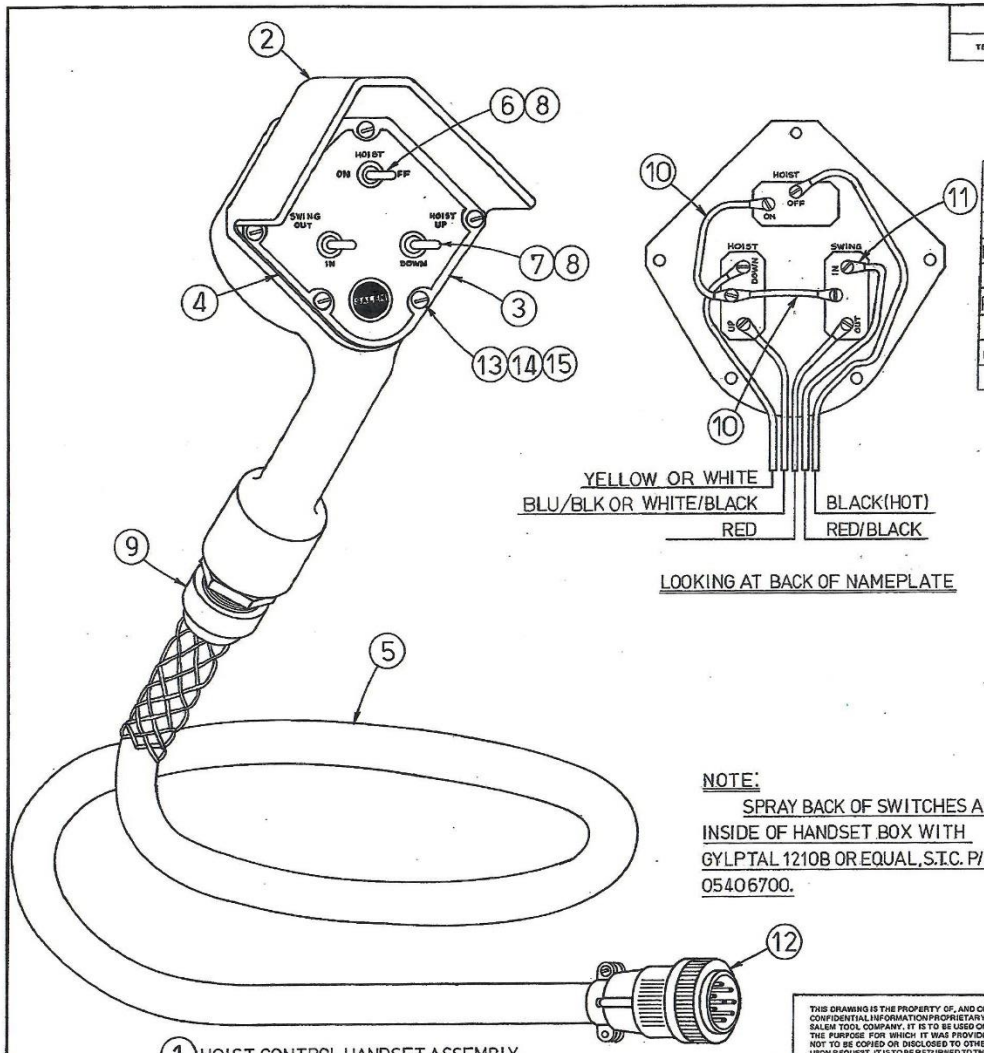
# DRAWING & PHOTO OF ACCIDENT SCENE




CAT
CAT
950B

# DRAWING & PHOTO OF HANDHELD REMOTE









| | ITT HANDSET WIRING CODE | | |
|---|---|---|---|
| ROYAL | WIRE COLOR | CONTACT LETTER | FUNCTION |
| BLACK | BLACK | A | HOT |
| YELLOW | WHITE | B | HOIST DOWN |
| BLU/BLK | WHITE/BLACK | C | HOIST UP |
| RED | RED | D | SWING OUT |
| RED/BLK | RED/BLACK | E | SWING IN |
| BROWN | GREEN | NOT USED | — |
| ORANGE | ORANGE | " " | — |
| BLUE | BLUE | " " | — |

NOTE:
SPRAY BACK OF SWITCHES AND INSIDE OF HANDSET BOX WITH GYLPTAL 1210B OR EQUAL, S.T.C. P/N . 05406700.

| PART NO. | ITEM NO. | NO. REQD. | DESCRIPTION | MTL. | ROUGH WT. |
|---|---|---|---|---|---|
| 02702400 | 15 | 5 | #8 INT. TOOTH LOCKWASHER CAD. PL. | | |
| 02702300 | 14 | 5 | #8-32NC HEX NUT CAD. PL. | | |
| 04001000 | 13 | 5 | RD.HD.MACH. SCREW #8-32NC X 1/2" LG. | | |
| 05417500 | 12 | 1 | ITT-CANNON STRAIGHT PLUG, INTEGRAL CABLE CLAMP #MS3106F22-23P | | |
| 05419500 | 11 | 9 | RING INSULATED SOLDERLESS TERMINAL, #6 STUD, #14 WIRE | | |
| 05408300 | 10 | 2 | JUMPER WIRE #14-1C X 2 1/2" LG., BLACK | | |
| 05419400 | 9 | 1 | KELLEM CORD GRIP #074-01-009 | | |
| 05403300 | 8 | 3 | SWITCH CAP | | |
| 05403200 | 7 | 2 | CUTLER-HAMMER TOG. SWITCH #8812K14 | | |
| 05406600 | 6 | 1 | CUTLER-HAMMER TOG. SWITCH #8801K22 | | |
| 05417800 | 5 | 1 | ITT-SDN CONTROL CABLE, 600 V. #14 AWG-8C X 3.0'-0" LG. USE PER WIRING CODE | | |
| 04506000 | 4 | 1 | GASKET H-3630 | | |
| 01409700 | 3 | 1 | NAME PLATE H-5800-18 | | |
| 05408502 | 2 | 1 | HANDSET H-3692 | | |
| 05418700 | 1 | | HOIST CONTROL HANDSET ASS'Y. | | |

| NO. | REVISION | DATE | CK. |
|---|---|---|---|
| 10 | ECN | | |
| 9 | ECN | | |
| 8 | ECN | | |
| 7 | ECN | | |
| 6 | ECN | | |
| 5 | ECN | | |
| 4 | ECN | | |
| 3 | ECN | | |
| 2 | ECN | | |
| 1 | ECN REDUCED | 1/29/79 | |

| USED ON | MODEL |
|---|---|
| F-5800-31 | S1500B |
| F-5800-140 | " |
| F-5800-157 | " |
| F-5800-159 | " |
| F-5459-463 | 1630-488K 5/11 |



TOLERANCE: UNLESS OTHERWISE NOTED
FRACTIONAL MACHINING DIMENSIONS ±1/64" UP TO 6" - ±1/32" OVER 6"
FRACTIONAL STRUCTURAL DIMENSIONS TO 30" ±1/16", 30" TO 60" ±1/8" OVER 60" ±3/16"
CAUTION: READ ALL NOTES BEFORE STARTING WORK DO NOT SCALE DRAWING

250 fR ROUGH
125 fO ORDINARY
63 fF FINE
32 fG GROUND
16 fP POLISH
UNLESS NOTED
FINISH

THE SALEM TOOL CO.
SALEM, OHIO

HOIST CONTROL HANDSET ASSEMBLY

DR. [illegible] CHK. SCALE C/O LAY
TR. APP. DATE 5/8/78 OUT

H-5800-20

CANTON CITY BLUE KOH-I-NOOR RAPIDRAW FILM 3-76

H-5800-20

# REPORT OF FATALITY

## AUGER ACCIDENT INVESTIGATION
## PRINCESS POLLY ANNA & JCT ENTERPRISES
## NO. 1 SURFACE MINE
## WV PERMIT NUMBER S00300212

## GENERAL INFORMATION

This report is based on an investigation conducted in accordance with Title 56, Series 3, Section 12 of the West Virginia Code of State Rules.

Mr. Roger Herndon, an employee of Princess Polly Anna & JCT Enterprises, was fatally injured in an accident which occurred at approximately 10:30 a.m. on October 17, 2018. Mr. Roger Herndon was working as an auger helper, in training, with Mr. Bill Herndon, the auger operator and father of the deceased, on the Salem 1500B auger machine. While the eighth piece of auger steel was being positioned to advance the auger hole, it was unintentionally pulled from the auger pan striking Mr. Roger Herndon.

The Greenbrier County 911 Emergency Service was contacted at 10:38 a.m. by Mr. Bill Herndon. Quinwood Emergency Ambulance Service was dispatched at 10:41 a.m. and arrived on scene at approximately 11:00 a.m. and gained access to Mr. Roger Herndon at 11:10 a.m. Quinwood Emergency Service transported Mr. Roger Herndon to the Greenbrier Valley Medical Center Emergency Room where he was pronounced dead. The Oak Hill Office of Miners' Health, Safety & Training was contacted at 11:34 a.m. by Mr. Kermit Holliday reporting that an accident had occurred. Mr. Steve Lafferty, Assistant Inspector-at-Large with the WV Office of Miners' Health, Safety and Training, Region IV issued a verbal control order and dispatched District Inspector David Boggs, Surface Inspector Tim Fitzwater, and Surface Inspector Victor Shingler to the accident site. A joint investigation with the Mine Safety and Health Administration (MSHA) along with management was started immediately.

## DESCRIPTION

The Princess Polly Anna & JCT Enterprises, No. 1 Surface Mine is located on Big Mountain Road off Anjean Road in Rupert, West Virginia. The mine was issued a permit on May 23, 2013. The mine employs eight (8) people including salary personnel. The mine operates one production shift per day from 7:00 a.m. to 5:00 p.m. The mine has two (2) active working pits that use various types of surface equipment including a Salem 1500B auger in the pits. The mine operates in the Sewell seam that is 48 to 72 inches high and a Sewell A rider seam which is approximately 24 inches high and located approximately 25 feet above the main Sewell seam. The mine produces approximately 105,000 tons of coal per year.

On October 17, 2018, the Princess Polly Anna Surface Mine crew started their shift at 7:00 a.m. The crew dispersed to various locations to perform their normal duties. Mr. Bill Herndon, auger

operator, and Mr. Roger Herndon, auger helper and apprentice surface miner, traveled into the main Sewell seam pit where the Salem 1500B auger machine was located and proceeded to perform a pre-operational inspection. Mr. Bill Herndon and Mr. Roger Herndon completed the augering of the first hole of the day at approximately 220 feet in depth. The auger crew set over to drill the second hole of the day. The auger crew had completed the seventh auger flight of auger steel (twelve feet 12' long and eighteen inches 18" in diameter). Mr. Roger Herndon was placing the eighth piece of auger steel into the belly pan. The eighth piece of auger steel was not correctly aligned and needed adjusted to connect it to the machine.

Mr. Roger Herndon used the handheld control switch to position the auger steel. The auger steel was inadvertently pulled from the auger pan striking Mr. Roger Herndon, knocking him into the stacked pile of auger steel adjacent to the Salem 1500B auger machine. Mr. Bill Herndon witnessed the accident and saw Mr. Roger Herndon fall to the ground. Mr. Bill Herndon immediately rendered assistance then went to get help.

Mr. Bill Herndon called for Mr. Kermit Holliday, E.M.T-M, on the radio in the articulating truck located in the pit being loaded by the Salem 1500B auger machine. At 10:30 a.m. Mr. Roger Wood, another truck driver, told Mr. Kermit Holliday that Mr. Bill Herndon needed him in the auger pit. When Mr. Kermit Holliday arrived at the top of the auger pit ramp he saw Mr. Bill Herndon signaling him to come into the auger pit. Mr. Kermit Holliday traveled down the pit ramp to the Salem 1500B auger machine and began assessing Mr. Roger Herndon's condition. Mr. Bill Herndon traveled to the mine office to contact 911 and retrieve first-aid equipment.

Mr. Bill Herndon returned to the auger pit where Mr. Roger Wood, Mr. Fred Taylor, and Mr. Evert Heimberger had arrived and were assisting Mr. Kermit Holliday with first-aid of the victim. The Quinwood Emergency Ambulance Service arrived at approximately 11:00 a.m. at the top of the auger pit ramp. Mr. Roger Herndon was placed on a backboard and transported up the auger pit ramp by Mr. Fred Taylor's pickup truck to the ambulance. C.P.R. was administered as Mr. Roger Herndon was transported up the pit ramp.

Mr. Roger Herndon was transported to the Greenbrier Valley Medical Center by Quinwood Emergency Ambulance Service, where he was pronounced dead at 11:55 a.m., by Medical Examiner Andrea Orvik.

## FINDINGS OF FACT

1. Mr. Roger Herndon was an apprentice surface miner, with two and one-half (2½) days total surface mining experience and was an experienced underground coal miner.
2. Records show Mr. Roger Herndon received experienced miner training and task training on Monday, October 15, 2018 for the job of auger helper, which he was performing at the time of the accident.
3. Mr. Roger Wood spent the entire day on Monday, October 15, 2018 and one-half (1/2) of the day on Tuesday, October 16, 2018 instructing Mr. Roger Herndon on performing the task of auger helper.

4. At approximately 10:30 a.m. on October 17, 2018 while installing a section of auger steel in the pan of the Salem 1500B auger, Mr. Roger Herndon was struck by the auger steel causing him to fall against the auger steel stacked adjacent to the auger miner.
5. Mr. Roger Herndon received medical treatment at the auger site by the onsite E.M.T-M.
6. Mr. Roger Herndon was pronounced dead at 11:55 a.m. at the Greenbrier Valley Medical Center Emergency Room.
7. A pre-shift equipment examination on the Salem 1500B auger machine had not been recorded in ink or indelible pencil on a form approved by the Director.
8. The handheld remote on the Salem 1500B auger was not properly maintained. The switches on the handheld remote were not functioning properly, in that the boom swing was working intermittently and at times did not control the boom swing function. The boom swing on / off switch was not correctly identified. The boom swing switch was energized when it was in the off position and deenergized in the on position. The handheld remote also contained a fourth switch which had no function. The Salem 1500B auger machine was manufactured with a handheld remote containing only 3 functional switches as identified by the manufacturer.
9. The Salem 1500B auger machine hydraulic boom swing pressure was set at approximately 960 psi. The manufacturer's recommended specification is 350 psi.
10. The hydraulic boom swing jack and the boom swing valve chest were bypassing, allowing the hydraulics to cause the boom swing jack to fully extend at any time the hydraulic pump was running without being controlled.

## CONCLUSION

Mr. Roger Herndon received fatal injuries when he was struck by a section of auger steel being installed in the belly pan of the Salem 1500B auger machine while employed as an auger helper.

## ENFORCEMENT ACTION

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

A non-assessed control order was issued in accordance with Title 56, Series 3, Section 51.1 of the Code of State Rules to preserve evidence following the accident.

A total of four (4) violations were issued during this investigation.

The following are the violations that were issued:
(Violation #1) Title 56, Series 3, Section 42.1 of the WV Code of State Rules
A pre-shift equipment examination on the Salem 1500B auger machine had not been recorded in ink or indelible pencil on a form approved by the director.

(Violation #2) Title 56, Series 3, Section 42.3.1 of the WV Code of State Rules
The handheld remote on the Salem 1500B auger machine had not been properly maintained. The switches were not functioning properly. The boom swing was working intermittently and at times

did not control the boom swing function. The boom on-off switch did not function as marked, it is also noted that the remote had an additional switch that had no function.

(Violation #3) Title 56, Series 3, Section 42.3.1 of the WV Code of State Rules
The Salem 1500B auger is not being properly maintained in that the boom swing hydraulic pressure was above the manufacturer's recommended specifications. The boom swing in / out pressure was approximately 960 psi and the manufacturer's recommended specification is 350 psi.

(Violation #4) Title 56, Series 3, Section 42.3.1 of the WV Code of State Rules
The Salem 1500B auger is not being properly maintained in that the boom swing jack and the boom swing valve chest were not functioning properly by allowing the hydraulics to bypass. This bypassing was causing the boom swing jack to fully extend anytime the hydraulic pump was running without being controlled.

## RECOMMENDATIONS

All employees will be task trained on the Salem 1500B auger by a qualified representative of the manufacturer.

The operator has requested the following modifications to the Salem 1500B auger machine to prevent a reoccurrence:

1. Install an operator cab with heat and air conditioning.
2. Install a grapple style arm which can be controlled from inside the operator's cab.
3. Remove the existing auger steel swing arm and hydraulic systems.
4. Conduct a complete inspection of all hydraulic systems and have all hydraulic pressures set to manufacturer's specifications.

Completion of the above modifications by the manufacturer will eliminate the need for an employee to be on the ground outside the machine.

## ACKNOWLEDGEMENT

The West Virginia Office of Miners' Health, Safety and Training acknowledges the cooperation of employees and management of Princess Polly Anna & JCT Enterprises, No. 1 Surface Mine, and the Mine Safety and Health Administration during this investigation.

## APPENDIX

- Mine Information Sheet
- Victim Information Sheet

# MINE INFORMATION

COMPANY Princess Polly Anna & JCT Enterprises

MINE NAME No. 1 Surface Mine

WV PERMIT S00300212

ADDRESS PO Box 886 – Lewisburg, WV 24901

COUNTY Greenbrier

DATE PERMIT ISSUED May 23, 2013 WORKING STATUS Active

LOCATION Big Mountain Road

UNION _____ NON-UNION Yes

DAILY PRODUCTION 500 tons

ANNUAL PRODUCTION TO DATE 105,000 tons

TOTAL EMPLOYEES 8 NUMBER OF SHIFTS 1

NAME OF COAL BED Sewell Seam & Sewell A Rider Seam

SEAM THICKNESS Sewell Seam 48 to 72 inches / Sewell A Rider Seam approximately 24 inches

ACCIDENT INCIDENT RATE 0 LOST TIME ACCIDENTS 0

TYPE OF HAULAGE N/A

WV OMHST INSPECTOR Matthew Mollohan

DATE OF LAST INSPECTION August 17, 2018

NOTIFIED BY Kermit Holliday/ Assistant Mine Foreman

TIME OF NOTIFICATION Approximately 11:34 a.m., October 17, 2018

CMSP – ANNIVERSARY DATE N/A

CMSP – CONTACT PERSON Kermit Holliday