

UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Culm Bank /Refuse Pile

Fatal Machinery Accident  
September 24, 2004

Barrackville Refuse Pile  
Wilson & Wilson  
Barrackville, Marion County, West Virginia  
I.D. No. 46-09064

Accident Investigators

Ronald V. Marrara  
Mine Safety and Health Specialist (Surface)

James M. Hindman  
Coal Mine Safety and Health Inspector

Michael P. Shaughnessy  
Mechanical Engineer, MSHA Technical Support

Originating Office  
Mine Safety and Health Administration  
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Kevin G. Stricklin, District Manager

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## ACCIDENT SCENE



**X** - Indicates where victim was found

## OVERVIEW

On Friday, September 24, 2004, at 11:00 a.m., Harlen R. Ott, age 63, was fatally injured while apparently attempting to dismount a Caterpillar bull dozer. Just prior to the accident, Ott was observed grubbing the area around a water treatment pond. Ott had a total of 8 years mining experience and more than 30 years experience operating various pieces of construction equipment.

There were no eye witnesses. For unknown reasons, Ott trammed his bull dozer just off the grubbing area and stopped the bull dozer on a sloped berm area adjacent to a level graveled roadway. It appears Ott then attempted to dismount the bull dozer with the blade elevated and the parking brake not engaged. During this process the bull dozer apparently began to drift forward and Ott slipped and fell to the ground in front of the moving bull dozer. Ott was struck by grouser(s) on the left track and received fatal injuries.

Thorough technical examinations of the bull dozer identified no mechanical defects that may have contributed to the accident. Other potential causes, such as Ott's medical conditions, were considered during the investigation. Weather and ground control conditions did not appear to be factors in the accident.

## GENERAL INFORMATION

Wilson & Wilson, Barrackville Refuse Pile, I.D. 46-09064, is located ½ mile west of Barrackville, WV on State Route 250/17. This surface facility employs 3 persons. Coal slurry material is removed from a slurry impoundment by the use of a 405 Koering dragline and 30 B Bucyrus Erie dragline. The coal material is placed in piles near the slurry impoundment. Another mining entity, Quality Reclamation Services, LLC., Refuse Area No.1, I.D. 46-08950, uses a 325 L Caterpillar backhoe to load the material in trucks which are contracted to transport the material offsite.

A third mining entity, Coresco, Inc., Barrackville Refuse Pile, I.D. 46-09050, works in the area in close proximity to Wilson & Wilson and Quality Reclamation Services, LLC removing coal from natural deposits in a surface mining operation. American Bituminous Power Partners LP (ABPPLP), Grant Town Power Plant. I.D. 46-08264, holds the required mining permits from West Virginia for the entire mining areas identified. Mine workers from American Bituminous Power Partners LP perform required water treatment for these areas, are responsible for the MSHA designated impoundments, and perform the required 7 day inspections required under 77.216-3(a).

The principal officials for Wilson & Wilson, Quality Reclamation Services, LLC, Coresco, and American Bituminous Power Partners LP are:

Esta C. Wilson, President	Wilson & Wilson
Ernest L. Wilson, Vice President	Wilson & Wilson
Dale L. Malinzak, Managing Member	Quality Reclamation Services, LLC
William B. Kania, Member	Quality Reclamation Services, LLC
Donald Redman, Member	Quality Reclamation Services, LLC
James L. Laurita, Jr., President	Coresco Inc.
Thomas A. Laurita, Vice President	Coresco Inc.
Toni D. Derring, Secretary/Treasurer	Coresco Inc.
Herbert R. Thompson, Plant Manager	ABPPLP
Bradley A. Christopher, Fuels Supervisor	ABPPLP
William H. Martin, Safety Director	ABPPLP

Wilson & Wilson is a new mining entity as of September 22, 2004. No regular Health and Safety Inspection (AAA) had been completed on this site. The non-fatal day's lost (NFDL) incident rate during the previous quarter for the nation was 2.01. Wilson & Wilson, Quality Reclamation Services, LLC, Coresco, Inc., and American Bituminous Power Partners LP reported no NFDL accidents for 2004.

## **DESCRIPTION OF THE ACCIDENT**

The day shift started at 6:00 a.m., on Friday, September 24, 2004, at Barrackville Refuse Pile. Esta C. Wilson, owner of Wilson & Wilson; Harlen R. Ott, bull dozer operator for Wilson & Wilson; and Daniel Marva, bull dozer operator for Quality Reclamation Services, LLC arrived at a central location where equipment was parked. After initial discussions of the work procedure for the day, the equipment pre-operational inspections were preformed. Marva then went to a separate location where he was assigned to operate a bull dozer. Wilson went to the coal slurry impoundment and began operating a dragline, removing coal slurry from the pond, and placing it in a pile. Ott trammed his assigned bull dozer to a water treatment pond designated by the operator as D-2 Impoundment. Ott's assignment was to prepare the area surrounding the impoundment for re-seeding. Work proceeded without incident throughout the morning. At approximately 9:00 a.m., Wilson left the silt pond and drove in his pickup truck to the D-2 Impoundment to check on Ott. Wilson stated that he spoke to Ott and that Ott indicated everything was fine at this time. Wilson proceeded back to his work location at the Silt Pond.

Gerald D. Peacock, Superintendent of Coresco, Inc., who was operating a water truck, passed by the D-2 Impoundment at approximately 10:30 a.m., and observed Ott operating the bull dozer. Peacock returned to the D-2 Impoundment at

approximately 10:45 a.m., to refill the water truck. Peacock stated that he made non-verbal contact with Ott and Ott returned the gesture indicating there was nothing wrong. Ott was operating the bull dozer and Peacock stated that he did not observe anything out of the ordinary at that time.

Peacock drove approximately 100 yards from the location where Ott was operating the bull dozer to refill the water truck from the D-2 Impoundment. Peacock stated that it takes approximately 12 minutes to fill the water truck. Peacock started the pump for the process and observed Ott operating the dozer at that time. When the filling procedure was approximately one half completed, he observed the dozer parked or stopped in the haul road. Peacock could not see if Ott was in the operator's seat at that time. After the refilling procedure was completed, Peacock immediately drove to the location where the dozer had stopped. Upon arrival, he found Ott lying on his back on the ground between the left track and blade with both his feet lying on the hydraulic jack cylinder. Peacock immediately got out of the truck to assist Ott. He discovered that Ott had no pulse, and that his appearance was blue with his stomach area swollen and extended. Immediately, Peacock called Marva on the C.B. radio and told him to contact Wilson to ask him to come to the accident scene immediately.

Peacock then used his cell phone to call 911. Wilson and Marva arrived very shortly after the 911 call was made. Marva and Wilson attempted to remove Ott, but his right side was wedged against the track. To remove Ott as gently as possible, the decision was made to back up the bull dozer. The bull dozer was backed several inches, and Marva pulled Ott away from the dozer.

The Barrackville EMS, which was dispatched at 11:17 a.m., arrived on scene at 11:25 a.m., just as Ott was being pulled away from the bull dozer. The EMS workers attempted to revive Ott until he was pronounced dead. Dennis E. Wilson, Marion County Medical Examiner, pronounced Ott dead at 11:55 a.m., Ott's body was then transported to Fairmont General Hospital located in Fairmont, WV.

## **INVESTIGATION OF THE ACCIDENT**

The investigation was conducted in cooperation with the West Virginia Office of Miner's Health, Safety, and Training. Other participants included management and/or labor from Wilson & Wilson, Quality Reclamation Services, LLC, Coresco Inc., and American Bituminous Power Partners LP. Those persons participating in the investigation are listed in the Appendix A of this report.

At the direction of Esta C. Wilson, Richard M. Stewart, Weighmaster for American Bituminous Power Partners LP, telephoned Ronald Marrara, Coal Mine Safety

and Health Specialist (Surface), notifying him at 11:55 a.m., that an accident or natural death had occurred on mine property. The accident occurred at 11:00 a.m. A 103(K) Order was issued immediately. Marrara contacted Richard L. Stefanick, Coal Mine Safety and Health Supervisor; Ronald L. Wyatt, MSHA Staff Assistant; and William E. Ponceroff, Assistant District Manager for Inspection Programs. MSHA management assigned Ronald Marrara to investigate the accident or natural death.

Ronald Marrara arrived on site at 1:45 p.m., and immediately began an inspection of the area involved in the accident. Photographs, video tapes, and general measurements were made of the accident site. Air quality was measured with a hand held instrument and air samples were taken. A MSHA qualified electrician examined the area for any stray electrical currents. The 103(k) order was modified on the evening of the accident to allow removal of the victim's lunch box containing perishable food products.

Interviews were conducted on September 24 and 27, 2004, with Gerald Peacock, Esta Wilson, Charles Piovarchy II, and Daniel Marva. Gerald Peacock and Esta Wilson were re-interviewed on October 20, 2004.

Michael P. Shaughnessy, a mechanical engineer from the MSHA Technical Support Group, conducted an inspection of the Caterpillar D4H bull dozer on September 30, 2004.

Jerry Vance, of the MSHA Education Field Services, reviewed the training given, the training plans, and training records of and/or pertaining to Harlen R. Ott on October 4, 2004.

The onsite investigation was concluded on October 5, 2004, and the 103(k) Order No. 7109164 was terminated.

## **DISCUSSION**

The dozer involved in the accident was a Caterpillar bull dozer; model D4H Series II LGP, serial number 45V52227. The operational weight of the bull dozer is 22,600 pounds. The track pads on the bull dozer are 30 inches wide with the grouser bars spaced an average of 6 inches. The grouser bars are approximately 1  $\frac{3}{4}$  inches high and  $\frac{3}{8}$  inches thick.

Testimony indicated Ott's health was poor, he had several medical conditions, and he was feeling somewhat ill and physically tired on the day of the accident. Additional testimony indicated Ott was physically challenged because of gout. On the morning of the accident, Ott stated that, "his legs would hardly carry him

anymore.” Testimony indicated Ott was very meticulous in following personal and equipment safety procedures.

An examination of the training records revealed that Ott had received all of the training required under 30 CFR Part 48. Weather conditions were dry and sunny. The temperature was in the mid 70 degree (Fahrenheit) range.

Just prior to the accident, Ott was performing normal mine work grubbing an area around a water treatment pond preparing that area to be reseeded. There was non-verbal communication with Ott at approximately 10:45 a.m., indicating there were no problems. A mine worker was in direct visual contact with Ott until 5 minutes before the accident occurred.

Ott was found with his eyeglasses on and in place. Chewing gum was removed from his mouth.

The dozer was found on a level, graveled roadway immediately adjacent to an elevated berm. The blade had been raised to a height of approximately 25 ½ inches, the engine was running, the transmission was in neutral, and the parking brake was not set or engaged.

A thorough inspection of the machine was conducted by personnel from MSHA and the West Virginia Office of Miners’ Health, Safety, & Training. No equipment defects affecting safety were found.

The seat belt was in good working order; however the seat belt length had been shortened such that Ott would not have been able to use it.

When the blade is lowered to the ground, the bottom dismount step is 9 ½ inches to the ground and the top step is 23 ½ inches to the ground. With the blade elevated 25 ½ inches from the ground the steps are on a slight angle with the bottom step averaging 26 1/8 inches from the ground and the top step averaging 39 inches from the ground.

Air quality tests taken on the bull dozer with the engine operating on September 24 and 27, 2004, indicated no toxic gases in the atmosphere.

An electrical examination of the bull dozer and area around the bull dozer was conducted. No stray voltages (AC or DC) were detected.



## ROOT CAUSE ANALYSIS

An analysis was conducted to identify the root cause(s) of the accident. During the analysis, a causal factor was identified, that if eliminated would have either prevented the accident or mitigated its consequences.

Causal Factor: The bull dozer was not secured from movement before the operator attempted to exit the machine. The parking brake was not set and the blade was not lowered the ground.

Corrective Action: Management must enforce all mandatory safety regulations and safe work practices.

## CONCLUSION

Harlen R. Ott, age 63, was fatally injured while apparently attempting to dismount a Caterpillar bull dozer. Ott had several medical problems and was somewhat ill the day of the accident. For unknown reasons, Ott trammed his bull dozer just off the grubbing area and stopped the bull dozer on a sloped berm area adjacent to a level graveled roadway. Ott then attempted to dismount the bull dozer with the blade elevated and the parking brake not engaged. During this process the bull dozer apparently began to drift forward, Ott slipped and fell to the ground in front of the moving bull dozer. Ott was struck by grouser(s) on the left track. In this process Ott sustained fatal injuries.

The accident occurred because the bulldozer was not secured against motion before the machine operator attempted to leave the machine.

Approved By:

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Kevin G. Stricklin  
District Manager

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Date

## ENFORCEMENT ACTIONS

- 103(k) Order, No. 7109164, was issued to Wilson & Wilson to ensure the safety of all persons until an investigation was completed and the area deemed safe.
- 104(a) Citation, No. 7109185, 30 CFR 77.1607(p), was issued to Wilson & Wilson because dippers, buckets, scraper blades, and similar movable parts were not secured or lowered to the ground when not in use. The operator of the model D4H Series II Caterpillar bull dozer, serial number 45V52227, failed to lower the front blade of the machine to the ground prior to attempting to dismount the stated equipment. The operator, Harlen R. Ott, subsequently slipped and fell in front of the drifting bull dozer and sustained fatal crushing injuries. Note, the dismounting steps are part of the blade mechanism.
- 104(a) Citation, No. 7109188, 30 CFR 77.1607(n), was issued to Wilson & Wilson because mobile equipment shall not be left unattended unless the brakes are set. The operator of the model D4H Series II Caterpillar bull dozer, serial number 45V52227, failed to engage the parking brake prior to attempting to dismount the stated equipment. The operator, Harlen R. Ott, subsequently slipped and fell in front of the drifting bull dozer and sustained fatal crushing injuries.

## APPENDIX A

List of persons participating and/or providing information during the in the investigation:

### Wilson & Wilson

Esta C. Wilson*	President
Ernest L. Wilson	Vice President

### Quality Reclamation Services, LLC

Charles S. Piovarchy II*	Superintendent
Daniel Marva*	Dozer Operator

### Coresco Inc.

Gerald D. Peacock*	Management – Consultant
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### American Bituminous Power Partners LP

Bradley A. Christopher	Fuels Supervisor
Brian A. Corley	Site Coordinator
Richard M. Stewart	Weighmaster
Thomas M. Daugherty	Electrician

### West Virginia Office of Miner's Health, Safety, and Training

Brian Mills	Inspector-at-Large
Mark Wilfong	Assistant Inspector-at-Large
Barry Fletcher	District Inspector
John Meadows	Surface Inspector
Terry L. Farley	Administrator

### Mine Safety and Health Administration

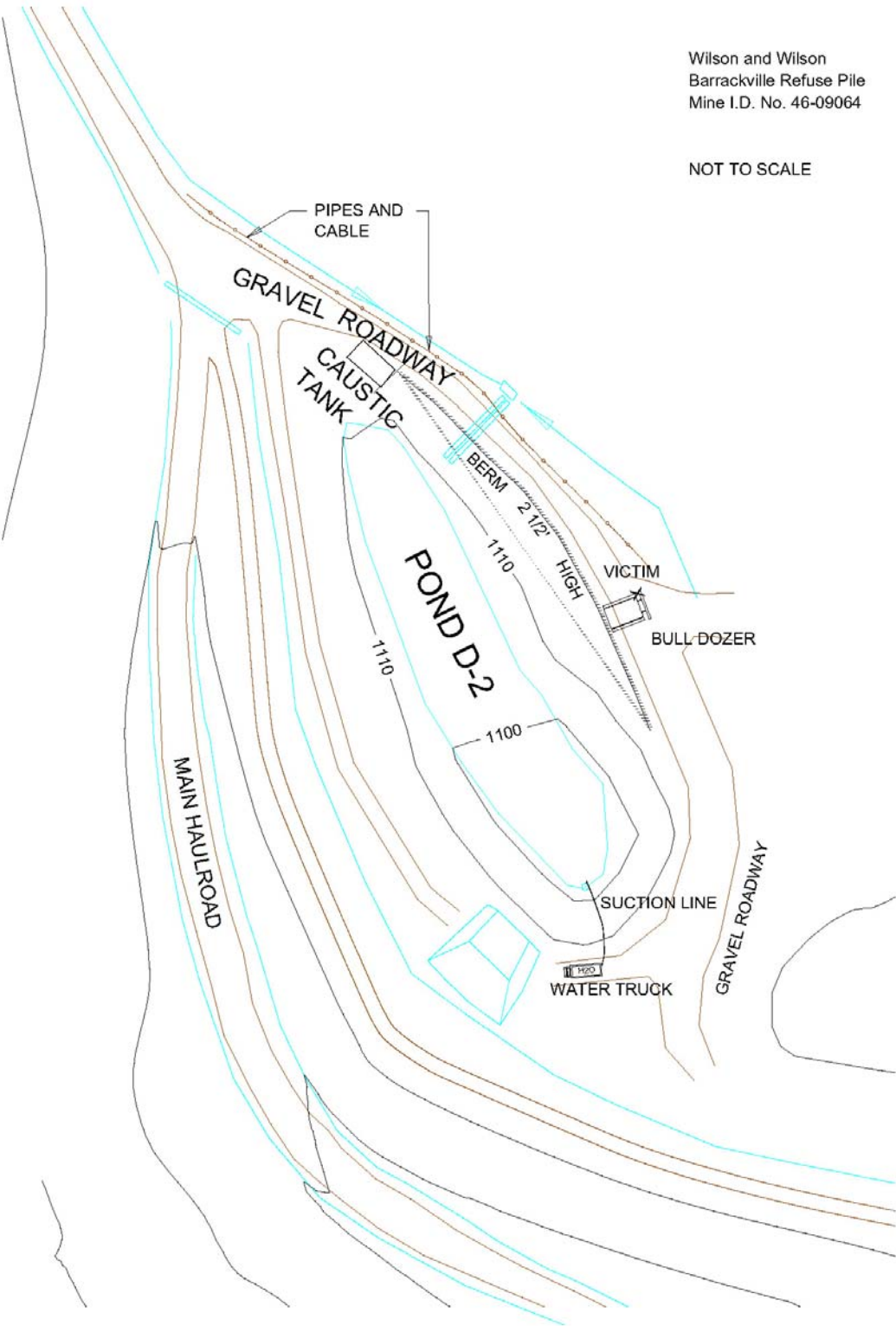
Ronald V. Marrara	Coal Mine Safety and Health Specialist (Surface)
James M. Hindman	Coal Mine Safety and Health Inspector
Jerry W. Vance	Mine Safety and Health Specialist (Training)
Michael P. Shaughnessy	Mine Safety and Health (Technical Support)
Ronald L. Wyatt	Staff Assistant

\* Persons Interviewed

**Appendix B**  
**Accident Site**

Wilson and Wilson  
Barrackville Refuse Pile  
Mine I.D. No. 46-09064

NOT TO SCALE



## Appendix C Mine Site

Wilson and Wilson  
Barrackville Refuse Pile  
Mine I.D. No. 46-09064

