CAI-2009-11

### UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION COAL MINE SAFETY AND HEALTH

#### **REPORT OF INVESTIGATION**

Surface Coal Mine

Fatal Automobile Accident (Powered Haulage) September 5, 2009

Rock Mountain Mining-Div/Twin Pines Coal Co., Inc. Shannon Mine Johns, Jefferson County, Alabama I.D. No. 01-03303

**Accident Investigators** 

Jarvis F. Westery Surface Safety and Health Inspector

> James Boyle Mining Engineer

Originating Office Mine Safety and Health Administration District 11 135 Gemini Circle, Suite 213 Birmingham, Alabama 35209 Richard A. Gates, District Manager

# TABLE OF CONTENTS

OVERVIEW1
GENERAL INFORMATION
DESCRIPTION OF ACCIDENT
INVESTIGATION OF THE ACCIDENT
DISCUSSION OF THE ACCIDENT
Physical Factors3
Environmental and Human Factors4
Work Experience and Training4
Accident Scenario4
ROOT CAUSE ANALYSIS
CONCLUSION
ENFORCEMENT ACTIONS7
APPENDIX A- Persons Participating in the Investigation8
APPENDIX B- Accident Scene9
APPENDIX C- Victim Information



### **OVERVIEW**

At approximately 1:50 a.m. on September 5, 2009, a 47 year old mine employee was fatally injured when his personal vehicle struck a gate post as he was leaving the mine property. After the employee's shift ended, he left the mine parking lot and was traveling on the mine's entrance road, toward the public road. Two other employees had left before him, also traveling in their personal vehicles. The victim caught up with and was passing one of the vehicles when he struck the 6-inch concrete-filled gate post.

### **GENERAL INFORMATION**

The Shannon Mine, ID No. 01-03303, is owned and operated by Rock Mountain Mining-Div/Twin Pines Coal Co., Inc. The mine is located in Johns, Jefferson County, Alabama. The mine is a surface operation, utilizing typical drill and shoot methods to break the overburden. The overburden is removed by excavators, bulldozers, and heavy duty rock trucks. Once the overburden is removed, the coal seam is mined using front end loaders and excavators. The mine operates two 9 ½-hr. shifts per day, Monday through Saturday. The mine employs 59 hourly and 7 management persons. The primary coal bed being mined is the Mary Lee seam, which averages 36-inches to 38-inches in thickness. The daily production rate is 1300 tons.

The most recent semi-annual safety and health inspection (E01) was completed by the Mine Safety and Health Administration (MSHA) on June 8, 2009. The Non-Fatal Days Lost (NFDL) injury incidence rate at the mine for the previous quarter was 5.56 compared to the national NFDL rate of 1.37 for surface coal mines.

The principal officials of the mine at the time of the accident were:

Roy Garner.....Superintendent Billy Orick.....Manager of Safety

# DESCRIPTION OF THE ACCIDENT

The normal work hours for the evening shift are 4:00 p.m. to 1:30 am. On the morning of the accident, Saturday, September 5, 2009, the work shift had ended and the miners had parked their mining equipment. This was the last shift of the work week. No work was scheduled until the Tuesday after the Labor Day holiday weekend.

The parking area is approximately 1.2 miles from the Blue Creek Road, a public highway, and is connected to this public highway by a dirt road. There are two gates along the dirt road: the "old gate," which remains open, and the "new gate," which is at the access point to the public highway. The old gate is approximately 1.1 miles from the mine parking area, and the new gate is approximately 1.2 miles from the parking area (Appendix B).

Two miners, Garland Bonner and Brandon Wilson, left the parking area ahead of Edwin Hasty, Jr., victim, in their personal vehicles. Bonner was in the lead vehicle, and drove in a deliberate and slow manner. Wilson was keeping pace

behind him. Hasty left in his personal vehicle, caught up to Wilson and while attempting to pass, struck the old gate post and overturned. His vehicle landed on the driver's side in the middle of the road. Bonner had already passed through the old gate. When he heard the crash, Bonner stopped between the old and new gates and came back to investigate. Emergency responders were contacted and the victim was pronounced dead at the scene by the coroner's assistant.

### INVESTIGATION OF THE ACCIDENT

MSHA was notified of the accident by the Emergency Call Center at approximately 2:00 a.m. on the morning of the accident occurrence. Coal Mine Safety and Health Supervisor, David Allen, issued a verbal § 103(j) Order to Billy Orick, Manager of Safety. The 103(j) Order was modified to a 103(k) Order, after MSHA accident investigators arrived at the scene, to assure the safety of miners until an investigation could be conducted. The accident investigators conducted an examination of the accident scene, interviewed witnesses, and reviewed conditions relative to the scene. MSHA conducted the investigation with the assistance of the State of Alabama Department of Industrial Relations Mining and Reclamation Division, miners, and mine management. Persons participating in the investigation are listed in Appendix A. Four persons were interviewed during the investigation.

# DISCUSSION OF THE ACCIDENT

# Physical Factors

The dirt road where the accident occurred is approximately 1.2 miles in length and 30 to 34-feet wide along its length, until it narrows to approximately 22-feet at the old gate (Appendix B). The road was well graded, free of standing water, and visibility was not affected by road dust.

The victim's vehicle was a 1995 Chevrolet S-10 pickup truck. It was examined for possible mechanical defects or other unsafe conditions and none were observed. Witness accounts indicate that the lights were operating properly.

It is estimated that the victim's speed at the time of the accident was in excess of the posted 20 miles per hour (mph). The victim's vehicle closed rapidly on Wilson's vehicle, which he was attempting to pass. After the accident, the driver's side airbag of the victim's truck had deployed, and the post-accident condition of the vehicle and gate post struck by the truck indicates the collision was violent. There were no skid marks present on the dry dirt road to indicate that the victim braked prior to impact.

# Environmental and Human Factors

The accident occurred during full darkness, at approximately 1:50 a.m. The only illumination available was provided by the vehicle's headlights. The weather was dry prior to the accident, with rain moving in afterwards.

Bonner, the driver of the lead vehicle, by his own account, was driving in a slow, deliberate manner. This was how he normally drove, which was well known to his co-workers, including the victim. As mentioned previously, the dirt road was in excess of 30-ft. wide until it approached the old gate, where it narrowed to approximately 22-ft. Wilson, keeping pace behind Bonner, stated that, as he approached the old gate, the victim's vehicle gained rapidly, and was moving at an excessive speed relative to his when the victim began to pass.

The victim's vehicle then struck the gate post and rolled, coming to rest in the middle of the entrance road on the driver's side. The victim was found positioned partially out of the driver's side window, with the vehicle resting on his upper torso. Examination at the accident scene indicates that victim was not wearing a seat belt when the accident occurred.

# Work Experience and Training

The victim was a rock truck driver and had been at this mine since October 2008. He received initial, Newly Employed, Inexperienced Miner Training in October 2008 and was given Task Training for the rock truck in the same month. He finalized his training in December 2008. The victim received the required Annual Refresher training in August 2009.

# Accident Scenario

The victim was aware that the driver of the lead vehicle (Bonner) normally drove in a slow, cautious manner. It appears that as the victim was approaching the two vehicles in front of him, he was attempting not only to pass Wilson, but also may have been looking "forward" to pass Bonner in an effort to get ahead of both vehicles before reaching the public highway. He likely did not realize his proximity to the gate, and believing he was in an area where the road was wider, attempted to complete the passing maneuver. This scenario, coupled with excessive speed and night driving conditions, may have caused him to "over drive" his headlights, so that he did not have time to react and take evasive maneuvers prior to striking the gatepost. Failure to wear a seatbelt was a factor in his ejection from the vehicle.

# **ROOT CAUSE ANALYSIS**

An analysis was conducted to identify the most basic cause of the accident, which could have been corrected through reasonable controls. During the analysis, a root cause(s) was identified that, if eliminated, would have prevented the accident.

Root Cause: The victim, in attempting to pass, executed a driving maneuver that was unsuitable for the prevailing conditions. Excessive speed and nighttime driving conditions contributed to the accident. Failing to wear a seatbelt is considered a contributing cause to the fatality.

Corrective Action: The operator shall implement a program of instruction and instruct all personnel on the importance of observing the posted speed limits, not passing on mine roads, and the use of seat belts while driving or riding in a personal vehicle.

#### CONCLUSION

On September 5, 2009, a 47 year old mine employee was fatally injured when his personal vehicle struck a gate post as he was leaving the mine property. Two other employees had left before him, also traveling in their personal vehicles. The victim caught up with and was passing one of the vehicles when he struck a 6-inch concrete-filled gate post. The accident occurred because the victim executed a driving maneuver that was unsuitable for the prevailing conditions. Excessive speed, night driving conditions, and failure to wear a seatbelt contributed to the accident.

Approved by:

Richard A. Gates

District Manager

Date

### **ENFORCEMENT ACTIONS**

### § 103(j) Order No. 6698270:

A fatal accident occurred at this mine on the mine entrance road where a vehicle hit the gate post.

This order is being issued to prevent the destruction of any evidence which would assist in investigating the cause or causes of the accident. It prohibits all activity at the mine entrance road from the county highway to 50 feet inby mine property gate where the accident occurred except to recover the individual.

Area or Equipment: The mine entrance road from the county highway to 50 feet inby the mine gate.

# Modification of § 103(j) Order to § 103(k) Order:

The initial order is modified to reflect that MSHA is now proceeding under the authority of 103(k) of the Federal Mine Safety and Health Act of 1977. This 103(k) Order is intended to protect the safety of all persons on-site, including those involved in recovery operations or investigation of the accident.

### APPENDIX A

# Persons Participating in the Investigation

### **SHANNON MINE**

Roy Garner	Superintendent
Billy Orick	Safety Manager
Donnie "O" Franklin	
Brandon Wilson	Rock Truck Driver
Garland Bonner	Bulldozer Operator
Jim Snow	Evening Shift Mine Foreman
Eddie Keenum	Foreman
Charles Prince	Foreman

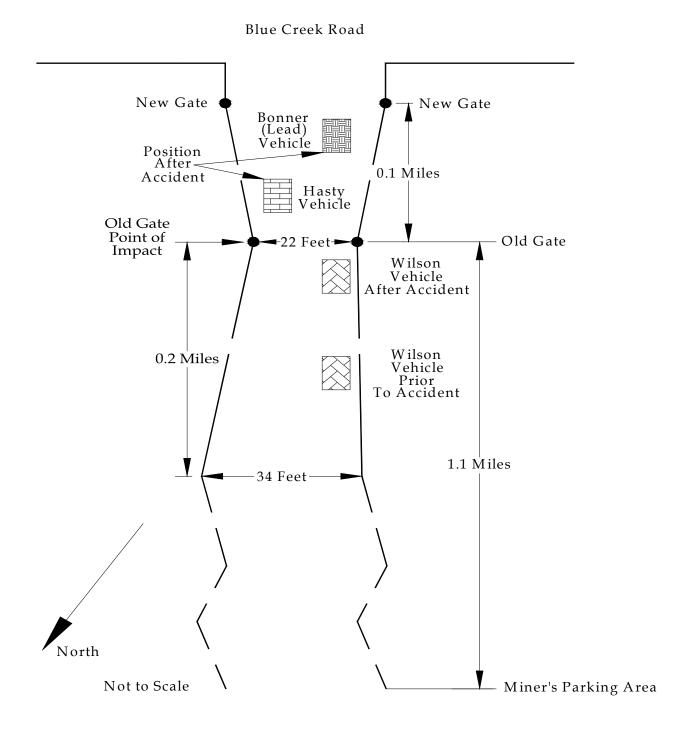
### STATE OF ALABAMA DEPARTMENT OF INDUSTRIAL RELATIONS MINING AND RECLAMATION DIVISION

Buddy Herron	Mine Inspector
Wayne Wilkes	Mine Inspector

### MINE SAFETY AND HEALTH ADMINISTRATION

Jarvis F. Westery	District 11 Surface Mine Safety and Health Inspector, Lead
	Investigator
Jacky Shubert	District 11 Supervisory Coal Mine Safety and Health
-	Inspector
James Boyle	District 11 Supervisory Coal Mine Safety and Health
-	Mining Engineer

### **APPENDIX B**



# **APPENDIX C- Victim Information**

Accident Investigation Data - Victim Information	n			Depar					
Event Number: 4 4 9 2 7 7 0			Mine S	Safety a	nd Heal	th Adm	inistrati	on ষ	//
Victim Information: 1									
1. Name of Injured/III Employee: 2. Sex 3. Victim's A									
Edwin D. Hasty M 47	01 Fata								
5. Date(MM/DD/YY) and Time(24 Hr.) Of Death:		6. Date and Tim							
a. Date: 09/05/2009 b.Time: 1:50			09/04/2009 b	Time: 16:					
•	. Work Activity when Ir	•			9. Was thi	is work ac	tivity part o	of regular jo	b?
176 Rock Truck Operator 0	98 Leaving Mine Pro	operty				Yes	No	x	
10. Experience Years Weeks Days	Years Weeks	Days	Years V	Veeks	Days		Years	Weeks	Days
a. This b. Regular Work Activity: 0 48 0 Job Title:	<b>a a</b>	c: This				d. Total			-
Work Activity: 0 48 0 Job Title:   11. What Directly Inflicted Injury or Illness?	0 48	0 Mine:			0	Mining:	0	48	0
			e of Injury or II						
110 Pickup Truck Overturned 13. Training Deficiencies:		370	Massive head	) iinjury					
Hazard: New/Newly-Employed Experience	d Miner		Annual:	1	Task:	E I			
14. Company of Employment: (If different from production operation						<u> </u>			
Operator	)		inde	pendent Co	ntractor ID:	(if applica	able)		
15. On-site Emergency Medical Treatment:									
Not Applicable:   First-Aid:   CPI	R: EMT:	X Med	cal Profession	nal:	None:				
16. Part 50 Document Control Number: (form 7000-1)		7. Union Affiliatio							
		7. Union Animatic	an or vicum.	9999	ivone (i	No Union	Amilation)		
Victim Information:									
1. Name of Injured/III Employee: 2. Sex 3. Victim's A	ge 4. Degree o	r Injury:							
		1							
5. Date(MM/DD/YY) and Time(24 Hr.) Of Death:		6. Date and Tir	ne Started:						
7. Regular Job Title: 8	. Work Activity when Ir	njured:			9. Was ti	his work a	ctivity part	of regular j	ob?
					1	Yes	No		
10. Experience: Maare Maaka Dave							L		-
a. This Years Weeks Days b. Regular	Years Weeks	Days c: This	Years	Week	Days	d. Total	Years	Weeks	Days
Work Activity: Job Title:		Mine:				Mining:			
11. What Directly Inflicted Injury or Illness?		12. Natur	e of Injury or I	Iness:					
13. Training Deficiencies:				1	Testu	1 1			
Hazard: New/Newly-Employed Experience	H - H		Annual:		Task:				
14. Company of Employment: (If different from production operato	r)	Inden	endent Contra	ector ID: (if s	annlicable)				
		indep			ipplicable)				
15. On-site Emergency Medical Treatment:	· · ·								
Not Applicable: First-Aid: CPR:	EMT:	Medi	cal Profession	ial:	None:				
16. Part 50 Document Control Number: (form 7000-1)	1	7. Union Affiliatio	n of Victim:						
Victim Information:									
1. Name of Injured/III Employee: 2. Sex 3. Victim's A	ge 4. Degree o	f Injury:							
5. Date(MM/DD/YY) and Time(24 Hr.) Of Death:		6. Date and Ti	me Started:						
7. Regular Job Title:	8. Work Activity when	Injured:			9. Was t	his work a	ctivity part	of regular	iob?
	,								
40. E						Yes	No	I	
10: Experience: Years Weeks Days a. This b. Regular	Years Weeks	Days c: Th	Years	Week	Days	d. Totai	Years	Weeks	Days
Work Activity: Job Title:		Mine				Mining:			
11. What Directly Inflicted Injury or Illness?			re of Injury or	llinese <sup>.</sup>					
		12. 1980	se or injury of	nii 1000.					
13. Training Deficiencies:									
Hazard:   New/Newly-Employed Experience	ced Miner:		Annual:		Task:				
14. Company of Employment: (If different from production operator	r)		· · · · · · · · · · · · · · · · · · ·			-+			
		Indepe	endent Contra	ctor ID: (if a	pplicable)				
15. On-site Emergency Medical Treatment:		•							
Not Applicable: First-Aid: CPI	⊋·   ΕΜΤ•	Ma	dical Professiv	onal:	None.				
	R: EMT:		dical Professio		None:				
16. Part 50 Document Control Number: (form 7000-1)	R: EMIT:	Me 17. Union Affilia			None:				

MSHA Form 7000-50b, Mar 2008

Printed 10/14/2009 2:13:26 PM