# West Virginia Office of Miners' Health, Safety and Training

May 14, 2011

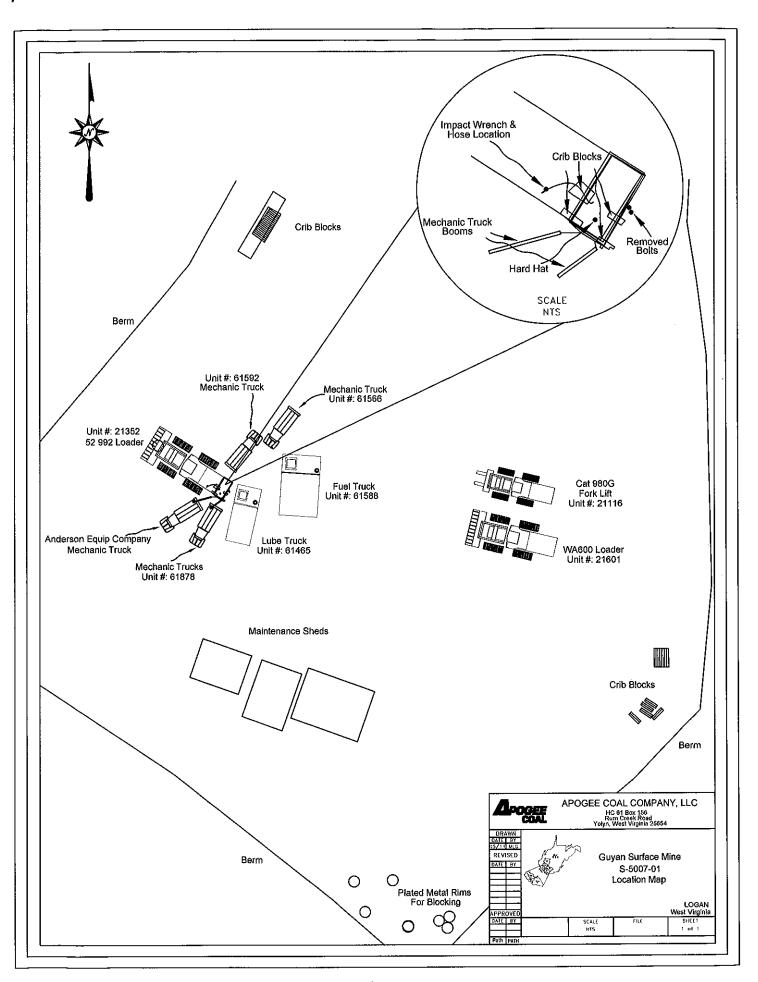
Report of Investigation Surface Coal Mine Fatality Fall of Equipment Accident

Apogee Coal Co., LLC Guyan Surface Mine Permit Number S-5007-01A

Region III Office
137 Peach Court, Suite 2
Danville, WV 25053
John Kinder, Acting Inspector-at-Large

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### **General Information**

This report is based upon an investigation conducted by the West Virginia Office of Miners' Health, Safety and Training in accordance with Title 56, Series 3, Section 50.1 of the Code of the State of West Virginia.

Apogee Coal Company, LLC was permitted to operate the Guyan Surface Mine on November 29, 2007. The employees enter the active permitted surface areas by mantrip vehicles and assigned mechanic trucks. The mine employs two hundred and six (206) people on two (2) shifts. Some production crews work alternating four (4) on and two (2) off schedules, while the maintenance crews work alternating four (4) shifts on and four (4) shifts off rotations with various contractors assisting on certain assigned jobs.

The mine utilizes heavy equipment, both electric and diesel, which includes 550 Komatsu hoes, 994D Caterpillar front-end loaders, 992G front-end loaders, D-10 and D-11 Caterpillar bulldozers, Komatsu and Caterpillar 240 ton rock and coal trucks, vertical rock drills with enclosed pressurized operator cabs, Caterpillar road graders.

The mining methods utilized are mountain top removal, contour, auger and highwall mining in the 5-Block, Lower 5-Block, Stockton and Coalburg seams.

Mr. Richard L. Young, Jr., was thirty-seven (37) years of age and was employed as a mechanic at this mine at the time of the accident. His hire date for this mine was October 10, 2005 and he had a total of five (5) years and six (6) months experience at this mine. His normal shift was twelve (12) hours, beginning at 7:00 p.m. and ending at 7:00 a.m. His most current annual refresher training was on January 19, 2011.

At approximately 8:15 p.m. on May 14, 2011, Mr. Richard L. Young, Jr., was fatally injured when he was struck and pinned beneath the rear bumper counterweight and empty fuel tank of a Caterpillar 992G front-end loader (company number 21352) on which he was assigned to perform maintenance. The accident occurred in the designated mine maintenance area.

The West Virginia Office of Miners' Health, Safety and Training, Region 3 Danville Office Acting Inspector-at-Large was notified of the accident by Barbara Smith from the West Virginia Mine Safety Hotline at 8:40 p.m. on May 14, 2011. The Logan Emergency Ambulance Service Authority responded to the scene as the result of a call from the mine.

Via telephone, Dr. Harmon of Huntington Medical Command Center ordered paramedic Ray Bryant to pronounce Mr. Young dead at the scene of the accident at 8:50 p.m.

At 9:20 p.m. on May 14, 2011, Mike Pack, Surface Mine Inspector, issued an investigative control order in accordance with the West Virginia Administrative Regulation Title 56, Series 3, Section 51.1. The control order was served upon Dennis Dillow, night shift superintendent.

### Description

Richard L. Young, Jr., night shift mechanic started his 4<sup>th</sup> shift of his four (4) day, twelve (12) hour shift rotation at 7:00 p.m. on May 14, 2011, under the supervision of James Browning, maintenance supervisor. At the beginning of the shift, Mr. Young was instructed by Mr. Browning to go to the maintenance area to perform scheduled preventive maintenance on the Caterpillar 992G front-end loader (or remove the counterweight system for fuel tank repairs). Mr. Young was assisted by Jason Gore, mechanic, with the preparation work and removal of the front-end loader rear bumper counterweight and empty fuel tank. Mr. Gore stated that while removing the wiring harness and hydraulic hose connection from the top of the counterweight, Mr. Young began removing the counterweight bolts with an air impact tool from underneath the rear bumper counterweight and empty fuel tank.

Mr. Brannon Adams, welder for Fab-Tech Corporation, was on site to measure and fabricate brackets to weld onto the counterweight so that it could be easily and evenly lifted for removal. Mr. Adams stated that after the measurements were obtained, he observed Mr. Young with an air gun underneath the rear bumper counterweight and empty fuel tank. He stated that while receiving a call on his cell phone, he heard the air gun rev up and that he heard a loud pop at which time he witnessed the rear bumper counterweight and empty fuel tank fall on the victim.

Calls were placed for emergency medical technicians, and while they were in route with first responder kits and supplies, two (2) mechanic truck booms were immediately attached to the rear bumper counterweight and empty fuel tank to relieve the weight. Blocking obtained from the maintenance yard was safely placed underneath the counterweight and fuel tank to facilitate the removal of the victim. After the victim was removed to a safe place, Evan Vance, EMT administered first-aid until released to paramedics with the Ambulance Authority.

#### Conclusion.

While removing the (m24x3x80-mm) boits from the underneath area of the model 992G front-end loader rear bumper counterweight and empty fuel tank, the unsecured rear bumper counterweight and empty fuel tank suddenly fell striking and pinning the victim underneath.

### **Findings of Fact**

- 1. The Caterpillar model 992G front-end loader rear bumper counterweight and empty fuel tank were not properly blocked or secured prior to disassembly.
- 2. As noted on the scaled engineer's drawing on page 3, within the maintenance area perimeter were wooden 6"x 6" various length solid blocks for cribbing, plated metal rims for blocking, a Caterpillar model 980G forklift for lifting and four (4) mechanic trucks equipped with lifting booms which can be operated electrically by remote control.
- 3. The fuel tank on the Caterpillar 992G front-end loader had been evacuated of fuel by a pump from a lube truck (company number 61465) prior to removal of the rear bumper counterweight and empty fuel tank.
- 4. Fourteen (14) of the required sixteen (16) bolts which secured the rear bumper counterweight and fuel tank to the frame of the Caterpillar 992G frontend loader had been removed by the victim at the time of the accident.
- 5. Total weight of the rear bumper counterweight and empty fuel tank was 11,685 pounds.

#### **Enforcement Action**

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

One (1) violation was issued during the investigation. This violation is a violation of a health and safety rule, is of a serious nature, and involved a fatality.

(Violation No. 49783): A non-assessed control order was issued in accordance with West Virginia Administrative Regulation Title 56, Series 3, Section 51.1. to preserve evidence following the accident.

(Violation No. ): Title 56, Series 3, Section 42.3(d) & (e): Men shall not work on, from or under machinery or equipment that has been raised until such machinery or equipment has

been securely blocked in place: By evidence gathered and verbal testimony given by witnesses present at the accident scene, a violation of 56-3-42.3 (d) & (e) occurred resulting in a fatal accident involving a Caterpillar 992G front-end loader and the assigned removal of the rear bumper counterweight and empty fuel tank of the Caterpillar 992G front-end loader without secured blocking in place prior to removal of the rear bumper counterweight and empty fuel tank. This violation is a violation of a health and safety rule, is of a serious nature, and involved a fatality.

#### Recommendations.

Safety Precautions/Procedures when performing maintenance on heavy equipment.

The following are procedures to be followed when conducting maintenance on heavy equipment:

- 1. Title 56, Series 3, Section 42.3(d) and (e) will be followed by all employees:
  - (d) Men shall not work on or from a piece of mobile equipment in a raised position until it has been securely blocked in place.
  - (e) No work shall be performed under machinery or equipment that has been raised until such machinery or equipment has been securely blocked in place.
- 2. Adequate blocking/cribbing material must be utilized.

Upon approval of this plan, training on Title 56, Series 3, Section 42.3 (d) and (e) will be conducted by management and documented on the appropriate forms.

This plan will be covered during review of CMSP, experienced miner training, annual refresher training and task training.

# Acknowledgement

The West Virginia Office of Miners' Health, Safety and Training gratefully acknowledges the cooperation of the management and employees of Apogee Coal Co., LLC, Guyan Surface Mine and the Mine Safety and Health Administration during this investigation.

# **APPENDIX**

- Mine Information
- Victim Information

# MINE INFORMATION

COMPANYApogee Coal Co., LLC			
MINE NAME_ Guyan Surface Mine			
WV PERMIT <u>\$00500701A</u> MSHA PERMIT NO. <u>46-08939</u>			
ADDRESS HC61 Box 156, Yolyn, WV 25654			
COUNTY Logan PHONE NO. (304)792-8200			
DATE PERMIT ISSUED 11/29/2007			
WORKING STATUSActive			
LOCATION Lowe's Mountain on Rum Creek Road			
UNIONXNON-UNION			
DAILY PRODUCTIONANNUAL PRODUCTION TO DATE978, 860			
TOTAL EMPLOYEES 206 NUMBER OF SHIFTS 2			
COAL SEAM NAME AND THICKNESS <u>5-Block, Lower 5-Block, Stockton, Coalburg</u>			
ACCIDENT INCIDENT RATE 0.0 year to date LOST TIME ACCIDENTS 0			
TYPE OF HAULAGETruck/Excavator			
WVOMHST INSPECTORLonnie Gore			
DATE OF LAST INSPECTION ongoing and current			
NOTIFIED BY Dennis Dillow, Superintendent			
NOTIFICATION TIME 05/14/2011 @8:38 p.m.			
CMSP ANNIVERSARY DATE 02/04/2012 CMSP CONTACT PERSON Dennis Wellman			