# UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION Metal and Nonmetal Mine Safety and Health

#### REPORT OF INVESTIGATION

Underground Metal Mine (Gold Ore)

Fatal Powered Haulage Accident November 11, 2018

At

Newmont USA Limited Pete Bajo Mine Carlin, Eureka County, Nevada Mine ID No. 26-02689

Investigators

Randy L. Cardwell Supervisory Mine Safety and Health Inspector

> Patrick L. Barney Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Western District
991 Nut Tree Road
Vacaville, CA 95687

Brian J. Thompson Acting Western District Manager

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#### **OVERVIEW**

Romney Natapu, a 45-year-old Underground Technician with over eight years of experience, was fatally injured on November 11, 2018, when he exited the Load-Haul-Dump (LHD) he was operating without properly securing it. The LHD rolled forward and ran over him.

The accident occurred because company policies, procedures, and controls were not followed to safely park unattended mobile equipment. The LHD was left unattended on a grade with the engine running without: 1) lowering the bucket to the ground; 2) setting the parking brake; 3) turning the engine off; and 4) chocking the wheels or turning the LHD into the rib.

#### GENERAL INFORMATION

Newmont USA Limited owns and operates the Pete Bajo mine, a multi-level underground gold operation, located near Carlin, Eureka County, Nevada. Sam Marich, Mine Manager, is the principal operating official at the mine. The mine operates seven days per week with two, 12-hour shifts per day and employs 95 miners.

The gold-bearing ore is drilled and blasted underground and then loaded into haul trucks. The gold-bearing ore is hauled to a milling operation for processing and refining. The finished products are sold to commercial industries.

The Mine Safety and Health Administration (MSHA) completed its last regular inspection of the operation on November 2, 2018.

#### **DESCRIPTION OF THE ACCIDENT**

On November 11, 2018, Romney Natapu (victim) reported for work at his normal starting time of 7:00 a.m. Before going underground, Natapu attended a meeting with the crew where Jordan Duke, Mine Foreman, gave the miners their shift assignments. Natapu was assigned to operate the water truck, clean out sumps with the LHD, haul supplies, and clean headings in preparation for drilling. Natapu proceeded underground and traveled through the mine watering haulage roads with a water truck. At 10:41 a.m., Natapu moved to an LHD and contacted dispatch to report he was going to start hauling supplies to the 4580-120 heading of the mine. At 12:54 p.m., Natapu started loading haul trucks from Muck Bay 99. At some point after this, Natapu traveled to the 4580 level to start cleaning up the 120 heading in preparation for drilling.

At 2:00 p.m., Duke arrived at the 4580 level and noticed the bucket of the LHD was rolled back and against the backfilled face of the 100 heading. Duke exited his vehicle and heard the engine of the LHD running, but did not see anyone in the immediate area. Duke called out asking if anybody was there and got no response. He looked in the cab of the LHD and noticed the parking brake was not set. He looked under the LHD and saw Natapu beneath the left front tire. Duke ran back to his vehicle and called for help on the radio, and the mine dispatcher activated the mine emergency response plan. Emergency Medical Technicians (EMTs) went underground and upon arrival at the accident scene, chocked the left rear tire of the LHD and shut the engine off. The EMTs evaluated Natapu's condition and found he was not exhibiting any signs of life. EMTs moved the LHD to retrieve the victim. A coroner from Eureka County, Nevada traveled underground to the accident scene and pronounced Natapu dead at 5:55 p.m. The EMTs then took the victim to the surface.

#### INVESTIGATION OF THE ACCIDENT

Chris Drobny, Senior Manager Safety Relations, called the Department of Labor's National Contact Center (DOLNCC) at 2:28 p.m., on November 11, 2018. DOLNCC notified Melvin Palmer, Supervisory Mine Safety and Health Inspector, by phone. MSHA started the investigation the same day. MSHA issued an order to mine management under the provisions of 103(j) of the Mine Act to ensure the safety of the miners. This order was later modified to 103(k) of the Mine Act when an inspector arrived at the mine.

MSHA's accident investigation team traveled to the mine, conducted a physical inspection of the accident site, interviewed miners, and reviewed conditions and work procedures relevant to the accident. MSHA conducted the investigation with the State of Nevada's Mine Safety and Training Section and with the assistance of mine management and miners. See Appendix A for persons participating in the investigation.

#### **DISCUSSION**

#### **Location of the Accident**

The accident occurred on the north end of the 4580 level at the backfilled face of the 100 heading. The 4580 level is accessed from the 4602 haulage road. The distance from the 4602 haulage intersection to the backfilled face of 4580-100 heading is approximately 102 feet. The 4580 level inclined an average grade of 6.5%, then declined toward the backfill face with an average grade of 12%. (See Appendix B Figures 1 and 2).

#### Load-Haul-Dump (LHD)

The LHD involved in the accident is a R1600G Caterpillar Loader. The LHD is equipped with rubber tires and a six-yard bucket and is powered by a Caterpillar 3176C, EUI ATAAC diesel engine. The LHD is approximately 33 feet long, over eight feet wide and weighs 65,697 pounds.

Investigators examined the steering and transmission joystick controls located on the front-left side of the operator's seat. The controls were found to be defective, in that the transmission failed to automatically shift into neutral when the locking lever was engaged. However, this was determined to not be a factor in the accident, and a non-contributory citation was issued.

#### **Brakes**

Investigator's tested the service brake and parking brake and found no defects.

Investigators concluded the victim parked the LHD on the downhill grade of the 4580 level. Upon exiting the operator's cab the victim did not follow company policies,

procedures, and controls by: 1) lowering the bucket to the ground; 2) setting the parking brake; 3) turning the engine off; and 4) chocking the wheels or turning the LHD into the rib. The victim walked down the decline for an unknown reason and the LHD rolled forward, running over him.

#### TRAINING AND EXPERIENCE

Romney Natapu had over eight years of mining experience and worked at this mine as an Underground Technician for over four years. A representative of MSHA's Educational Field and Small Mine Services (EFSMS) staff conducted a review of the mine operator's training plan and records. EFSMS reviewed the training records for Natapu and found them to be in compliance with MSHA training requirements.

#### **ROOT CAUSE ANALYSIS**

The accident investigation team conducted a root cause analysis to identify the underlying cause of the accident. The team identified the following root cause and the corresponding corrective action was implemented to prevent a recurrence.

**Root Cause**: Management policies, procedures, and controls were not followed to ensure the safe parking of unattended mobile equipment. The LHD was left unattended on a grade, engine was running, park brake was not set, and tires were not chocked or turned into the rib.

Corrective Action: The operator retrained all miners on the company's policies, procedures, and controls for parking LHD equipment. The retraining stressed the importance of: 1) lowering the bucket to the ground; 2) setting the parking brake; 3) turning the engine off; and 4) chocking the wheels or turning the LHD into the rib.

#### **CONCLUSION**

Romney Natapu was fatally injured when he exited the LHD he was operating without properly securing it. The LHD rolled forward and ran over him. The accident occurred because company policies, procedures, and controls were not followed to safely park unattended mobile equipment. The LHD was left unattended on a grade with the engine running without: 1) lowering the bucket to the ground; 2) setting the parking brake; 3) turning the engine off; and 4) chocking the wheels or turning the LHD into the rib.

#### **ENFORCEMENT ACTIONS**

Order No. 9379173 was issued to mine management at the Pete Bajo mine under the provisions of section 103(j) of the Mine Act. An Authorized Representative modified this order to section 103(k) of the Mine Act upon arrival at the mine site.

An accident occurred at this operation on 11/11/2018 at approximately 2:15 p.m. As rescue and recovery work is necessary, this order is being issued, under section 103(j) of the Federal Mine Safety and Health Act of 1977, to assure the safety of all persons at this operation. This order is also 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 Pete Bajo Mine until MSHA has determined it is safe to resume normal mining operations in this area. This order applies to all persons engaged in the rescue and recovery operation and any other persons on-site. This order was initially issued orally to the mine operator at 14:41 and has now been reduced to writing.

<u>Citation No. 8568344</u> was issued to mine management at the Pete Bajo mine, under the provisions of Section 104(a) of the Mine Act for a violation of 30 CFR 57.14207.

A fatal accident occurred at this operation on November 11, 2018 when the equipment operator was crushed by the left front tire of the Caterpillar R1600G Loader (LHD) he had been operating. The accident occurred on a grade, with the LHD being left unattended and the parking brake was not set, the tires were not chocked and the engine was running.

Approved:		Date:	
	Brian J. Thompson		
	Acting District Manager		

# Appendix A Persons Participating in the Investigation (Persons interviewed are indicated by a \* next to their name)

#### **Newmont USA limited**

Sam Marich Mine Manager

Chris Drobny Senior Manager Safety Relations
Tim Burns Maintenance HSLP Manager
Gustave Friesen Operations Superintendent

Chris Torres Senior Specialist Health and Safety

Hilary Wilson Legal Counsel Jordan Duke\* Mine Foreman

Christopher Urie, (CJ)\* Underground Technician Jason Mayne\* Underground Technician Mine Rescue Team

Frank Jenkins\* Leadman Bryan Dimick\* Leadman

Dustin Jones\* Underground Technician

Cody Spring\* Leadman

Gabrail Donaldson\* Leadman, Leeville Mine

#### **Cashman Equipment**

Austin Senecal Technical Communicator

#### **State of Nevada's Mine Safety and Training Section**

Dan Inman Mine Inspector

### **Mine Safety and Health Administration**

Randy L. Cardwell Supervisory Mine Safety and Health Inspector

Patrick L. Barney Mine Safety and Health Inspector

Norman J. Zeman Mine Safety and Health Specialist (Training)

## APPENDIX B

Figure 1

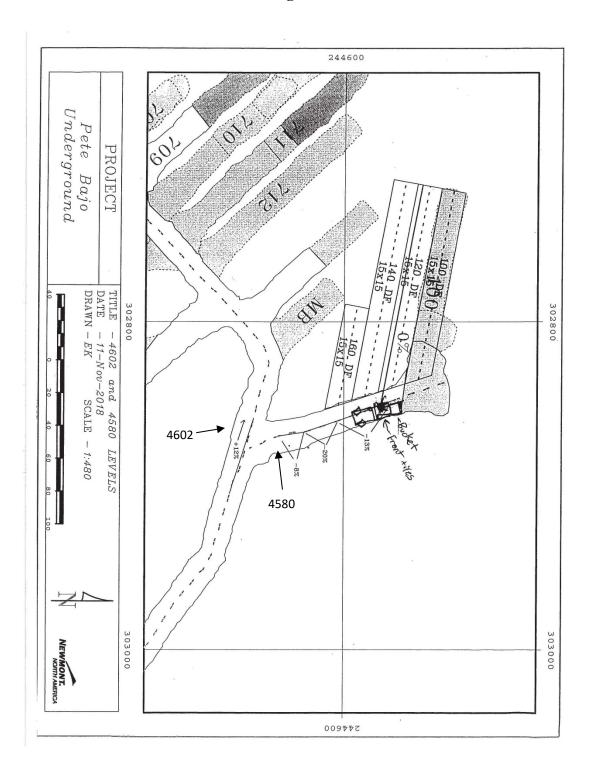


Figure 2

