

UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Underground Mine

Fatal Powered Haulage Accident  
September 16, 2014

West Ridge Mine  
West Ridge Resources Inc.  
East Carbon, Carbon County, Utah  
ID No. 42-02233

Accident Investigators

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Coal Mine Safety and Health Inspector

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### OVERVIEW

On Tuesday, September 16, 2014, at approximately 1:30 a.m., mobile equipment operator Alejandro Ramirez (victim) was fatally injured when the Wagner ST-2DS mobile diesel can-setter he was operating, articulated and crushed his exposed upper body. The victim's fatal injuries were the result of his body being caught between the cab frame and the water make-up tank frame.

### GENERAL INFORMATION

West Ridge Mine is an underground coal mine located near East Carbon City in Carbon County, Utah, within the Book Cliffs coal field. The mine is owned and operated by West Ridge Resources, Inc. This operation uses a hybrid DBT and Joy Mfg. longwall mining extraction system and two continuous mining machine development sections to mine sub-bituminous coal in the Lower Sunnyside coal seam. The mine normally operates two nine-hour production shifts per day, five to six days per week. The mine employs 186 miners, with 174 working underground and 12 on the surface. The miners are not represented by a labor organization.

The mine produces an average of 10,000 tons of raw material per day. Current methane liberation is 1,454,019 cubic feet per 24 hour period based on an air sample analysis completed on October 27, 2014, for the 103(i) status. This mine is on a 5-day 103(i) inspection cycle for excessive methane liberation.

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

David W. Hibbs ..... President, West Ridge Resources, Inc.  
 Darrell A. Lenard.....Superintendent  
 Angelo P. Konakis.....General Mine Foreman  
 Hubert Wilson.....Safety Director  
 Andrian Kyle Abetya.....Midnight Shift Supervisor  
 David Lee Montoya.....Midnight Longwall Support Foreman

The last regular safety and health inspection was completed on June 30, 2014, by the Mine Safety and Health Administration (MSHA). The third quarter safety and health inspection that commenced on July 5, 2014, was in progress when the accident occurred. The Non-Fatal Days Lost (NFDL) injury incident rate for the mine operator in 2013 was 5.71, compared to the National NFDL rate of 3.25 for mines of this type.

### DESCRIPTION OF ACCIDENT

Prior to the accident, Ramirez reported to the mine before 11pm on Monday, September 15, 2014. Ramirez had been reassigned to work from 11:00 p.m. to 8:00 a.m. Tuesday morning (midnight shift). The reassignment was normal during longwall extractions at the end of a longwall mining cycle. Ramirez and other miners with skills beyond their normal mining positions were utilized to retrieve expended materials, assist in the longwall equipment removal, operate diesel equipment, and other duties, as assigned. Ramirez's regular job assignment was a shuttle car operator on a continuous mining machine unit.

Andrian Kyle Abetya, Midnight Shift Supervisor, was provided a list of those miners reassigned to his shift, and Ramirez was on that list. Based on Ramirez's previous work during longwall extractions, he was assigned to David Lee Montoya, Longwall Support Supervisor, to operate the a Wagner ST-2DS (Wagner), No. 24-43 can setter, parked in the number two entry of the B Canyon Mains at crosscut No. 11. This is the intake access into the two entry longwall panel designated as 23<sup>rd</sup> East, 004-0 MMU (see Appendix A).

Ramirez rode into the mine with Steve Hamilton, Miner, and Antonio Leon, Miner, and was dropped off where the Wagner was parked. Pallets of crib blocks were transported from the surface into 23<sup>rd</sup> East by diesel powered material carriers. The pallets were staged in the 23<sup>rd</sup> East longwall intake entry so the Wagner could be used to pick up and store them in a designated area for easy access when the longwall shields were removed.

At 12:26 a.m., Ramirez called Montoya, advising him that water was needed for the exhaust scrubber on the Wagner. No other problems with the machine were relayed to Montoya. At approximately 1:22 a.m., Jesse Egbert, Equipment Operator, drove a Tamrock 980L utility tractor and trailer into 23<sup>rd</sup> East from the B Canyon Mains with instructions to pick up expended utilities and pipe. The Wagner was blocking the entry one crosscut inby the corner. Egbert honked the horn on the 980L tractor, but received no response. About the same time, coming outby from 23<sup>rd</sup> East, Hamilton and Leon were in an Isuzu pick-up truck, also blocked by the Wagner.

Egbert parked the 980L tractor and walked past the Wagner to the Isuzu pick-up. Egbert noticed the Wagner was idling. Egbert did not see Ramirez when he passed on the off side of the Wagner. Egbert asked Hamilton and Leon if they knew where Ramirez was. Both Leon and Hamilton stated they had seen Ramirez moving a pallet into the storage entry earlier, but had not had contact with him since then.

At 1:28 a.m., Hamilton tried to call Ramirez on the mine wide phone system and received no response. At about the same time, Egbert and Leon both noted a light shining under the Wagner and went to investigate. They found Ramirez in the articulation pinch point area, at the operator's compartment entrance, with the machine pivoted in the closed position. Ramirez was observed partially out of the cab with his torso outside the machine frame.

At 1:30 a.m., Egbert called Abetya, while Leon ran into the section and notified Montoya that Ramirez was injured in the Wagner. Abetya contacted Kim Ward, Conspec (atmospheric monitoring system) Operator, while driving to the accident scene. Ward was instructed to contact the ambulance service and mine management that a serious accident had occurred. Ward contacted East Carbon ambulance and East Carbon police at 1:36 a.m. Sargent Phillip Holt, East Carbon police, arrived at 1:53 a.m. at approximately the same time as the ambulance.

Leon and Montoya both ran outby from crosscut No. 4 to the Wagner. Hamilton was instructed to support Ramirez's upper body. Montoya could not reach the steering control from the operator's access side so he went to the front of the machine and reached into the front canopy opening and articulated the Wagner open. The articulation released Ramirez' body from the pinch point and Hamilton, Egbert, and Leon placed him on the mine floor. Hamilton returned into the 23<sup>rd</sup> East section and retrieved the section first aid kit, stretcher, and Automated External Defibrillator (AED). Abetya arrived at this time and no vitals were detected. Cardiopulmonary resuscitation (CPR), was started immediately. The AED advised that no shock be given.

CPR was continued from the underground accident scene to the surface. Shortly after reaching the surface, care of Ramirez was turned over to the paramedics when they arrived on-site at 2:03 a.m. CPR was halted when no vital signs could be detected. Carbon County Sheriff, Sergeant David Brewer, acting in his capacity as Carbon County Medical Examiner, arrived at 2:52 a.m. and determined a time of death of 1:34 a.m., based on information he received regarding the time Ramirez was recovered.

### INVESTIGATION OF THE ACCIDENT

MSHA was notified at 2:14 a.m. A technical problem with the MSHA Call Center prevented the mine operator from being able to inform MSHA of this accident within 15 minutes. Peter Saint, Electrical Supervisory Coal Mine Safety and Health Inspector, verbally issued a 103(j) order at 2:35 a.m. to the mine operator.

Saint notified James Preece, Acting Assistant District Manager, and Donald Durrant, Price Field Office Supervisor, who notified Vernon Marvidikis, Coal Mine Safety and Health Inspector, of the accident.

Durrant and Marvidikis arrived at the mine at approximately 5:30 a.m. Upon arrival, Durrant modified the 103(j) order to a 103(k) order to insure the safety of all persons during the accident investigation and to preserve all evidence at the accident scene.

The investigation was conducted in cooperation with the Utah State Labor Commission, Office of Coal Mine Safety. Interviews were conducted with persons considered to have knowledge of the facts and circumstances surrounding the accident. The accident area was surveyed with the mine engineering staff. A list of the persons who participated in the investigation is contained in Appendix B.

## DISCUSSION

### Accident Location

23<sup>rd</sup> East is a two entry longwall headgate with conveyor belt entries. Local geology showed an average seam thickness of 96 inches. The seam had a 13 percent grade with the machine articulated upgrade. The roof, rib, and floor conditions did not contribute to the accident.

The pallets being handled by Ramirez held 44 crib blocks, which were eight by eight by thirty-six inches, with two pallets setting on the lower rib outby the front of the Wagner. The Wagner that Ramirez was operating when the accident occurred had lift forks installed so it could remove pallets of cribs delivered to the No. 11 crosscut in the B Canyon mains. The pallets were stored between the ventilation stopping at the head roller of the 23<sup>rd</sup> East longwall belt and intake access.

### Wagner ST-2DS Scooptram Load-Haul-Dump (LHD) Loader with Can Setter

The Wagner ST-2DS Scooptram load-haul-dump (LHD) unit was manufactured in 1989. The Wagner was purchased as a used LHD in 2003 with two other ST-2DS's. In 2007, West Ridge applied for and was granted a field modification for the Wagner to have greater versatility in mine production work. It was originally equipped with a 2-yard ejector bucket, which had a hydraulically movable plate that pushes material out of the bucket.

Behind the longwall face, the mine installed secondary roof supports called "cans." These were mild steel cylinders filled with an air-entrained concrete. Cans were manufactured in 18, 24, or 36-inch diameters, and of the length necessary to match the entry height. The Wagner had equipment that would pick-up cans, carry them to the installation site, rotate to vertical, and set the can in place. Miners then secured each can in place with caps and wedges. West Ridge adapted the Wagner with a bulk paper roll lifting clamp that was suited for the can installation requirements, made by Cascade Clamp, Mfg.

The third modification option for the Wagner was a set of lift forks similar to the forks on a forklift. Prior to the accident, can setting was finished and pallets of crib block were brought into the longwall as additional roof support where cans could not be installed. The Wagner was in this configuration at the time of the accident.

The Wagner consisted of two major sections with an articulation joint between them. The front section included the can setter, forks or a 2-yard bucket, lift boom, hydraulic cylinders, front drive axle, and operator's compartment. The rear section included the engine, torque converter, transmission, rear drive axle, exhaust scrubber and fire suppression system.

This four-wheel drive LHD was powered by a Caterpillar 3304 PCNA, diesel engine, with a four-speed transmission for both the forward and reverse directions. Fourth gear was blocked out.

The LHD was equipped with an air actuated, hydraulic braking system at each wheel, applied with an air treadle valve mounted at the foot pedal. There was a second braking system for emergency and parking brakes. This system was spring applied and hydraulically released. It had multiple wet discs and was built into the transmission.

The weekly examination for the LHD, required under 30 CFR § 75.1914(f), was completed at approximately 9:00 a.m. on September 15, 2014, without any defects or hazardous conditions noted.

Accident investigators found the Wagner's transmission forward/reverse control arm in the neutral position, the gear selector in the "first" gear position, the park brake set, and the headlight switch in the "rear on" position.

#### **Machine's Operator Compartment**

The operator's seat and compartment was oriented on the left side of the machine, adjacent to the forward wheel assembly. The operator sat perpendicular to the direction of travel in a semi-reclined position, and looked left for forward travel, and looked right when traveling in reverse. There was no door on the operator's compartment side access which was open to the articulation area. The Wagner was not provided with a restraint system that would keep the operator within the confines of the operator's compartment. It is not known why the victim was partially outside of the operator's compartment.

All hydraulic controls were mounted within the compartment for steering, boom control, and can setter control. After the modification, the boom lift and bucket levers operated similar functions for the can setter clamp. Additional levers operated the rotation and clamping of the can setter. All were readily accessible.

A manual park brake release was included in the operator's compartment.

The operational gauges, air toggle lever, system override, diesel motor air start buttons, brake release, and a hand held fire extinguisher, were mounted on the rear section at arm's length. All gauges functioned as required. The certified canopy was adjusted to its lowest setting, restricting the operator's view to the rear.

The service brake pedal was located to the left of the throttle pedal in standard automotive orientation. Both pedals were tested and moved freely. Spring returned them when released without obstruction.

The steering was controlled by a ½ inch “Mono Control” joystick type rod with a plastic knob threaded on its end that traveled up or down in a slotted guard. The joystick was spring-centered and caused right and left machine articulation movement with the speed of articulation being proportional to the lever displacement and motor speed. With the joystick in the down position, the Wagner turned left in forward travel.

A hinged, forked mechanical steering lock was added to the joystick guard. Its intent was to hold the joystick in the centered position.

### **Equipment Testing**

To complete the site investigation, the Wagner involved in the accident was inspected to facilitate function testing. Multiple machine mechanical and safety deficiencies required repairing, before the Wagner could be tested.

Once repaired for testing, the machine was able to articulate fully to the left as it did in the accident. To articulate, the machine had to overcome the fact that the park brake was set, friction from contact with the mine floor, and turn up hill against the 13 percent grade. The Wagner was articulated to the left multiple times to show the position and closure necessary to simulate the condition that occurred during the accident. It took an average of 28 seconds to close to the steering stops. The gap between the operator’s compartment frame to the water tank frame, when fully articulated to the left to the steering stops, measured 3 ½ inches (see Appendix C).

At some point in time, after original manufacturing and prior to West Ridge’s purchase, metal blocks were added to the original steering stops at the articulation frame that increased the closure distance between frames, so that a miner could potentially not be crushed if his body was in the articulation area. The off side steering stop plate was measured at 4 ¼ inch long by 2 ¼ inches wide and estimated to be ½ inch thick. When examined, the operator’s side forward steering stop was missing. This allowed the closure, frame to frame, at the pinch point where the victim became entrapped. These steering stops were not original to the machine when manufactured (see Appendix C).

After testing was completed, the Wagner was determined to be unsafe to drive out of the mine and that it needed to be towed. Both Wagner LHDs were removed from the 23<sup>rd</sup> West sections and were taken to and secured in the mine’s surface shop. Gary Clark, Mechanical Engineer MSHA Approval and Certification Center, and Dwayne Brown, Coal Mine Safety and Health Diesel Specialist, inspected both operating Wagner LHD’s using the Wagner/ Atlas Copco inspection criteria.

When examined immediately during the accident investigation, the following defects were found;

- (1) The inspection/access cover on the side of the fuel tank was leaking diesel fuel. Diesel fuel was dripping from the machine onto the mine floor.
- (2) The fork lift attachment keeper pin was not installed. The pin was sitting in front of the operator’s compartment.

- (3) The manual park brake release system would not pump up and manually release the brakes with the engine not running. The park brake tow valve did not automatically return to the park brake applied position when released as required by the equipment manufacturer.
- (4) The high engine temperature shutdown valve did not shut the machine's engine down at 212 degrees or lower.
- (5) The low scrubber water shutdown level did not shut the machine's engine down at the proper level.
- (6) The low engine oil pressure shutdown system did not function properly when tested.
- (7) In addition to the safety defects, accumulations of combustible materials in the form of coal, coal fines, oil, diesel fuel, oil and diesel fuel soaked coal had been allowed to accumulate on the Wagner. When examined, oil and oil soaked coal covered the main hydraulic tank, front and side of the transmission, and the boom and front frame of the machine. Diesel fuel and fuel soaked coal, approximately 1 inch in depth, was on and around the machine's diesel fuel tank. A puddle of diesel fuel was noticed under the machine.
- (8) A primary defect directly related to the accident was found with the steering control joystick. Due to the loss of the original plastic steering knob, a modified handle assembly was made. This improvisation consisted of adding at the ½ inch threaded end of the control rod a ½ to ¾ inch pipe bell reducer. Inserted into the ½ inch end of the pipe bell reducer was a ⅝ inch eye or ring type lift bolt. Since the threads didn't match, electrical tape was wrapped around the control rod and attachments to hold everything in place. When removed, the control rod, eye bolt, pipe fitting, and tape weighed 15.2 ounces. The Original Equipment Manufacturer (OEM) knob weighed about 1 ounce. As the handle assembly loosened, more tape was wrapped until it was 1.315 inch in diameter, (0.77 inch wider than the steering interlock), and extended from in the guard plate slot to the base of the ring. The addition of multiple layers of tape created a frictional contact with the guard which, when combined with the added weight of the assembly, held the steering Mono Control rod down in the left articulating position.
- (9) The operator's side forward steering stop was missing.

MSHA's specialists determined the numerous violative conditions on the Wagner were obvious and had, with a high degree of probability, been in place prior to when the accident occurred.

### **West Ridge Equipment Examinations**

West Ridge mine maintenance personnel received their initial 30 CFR § 75.1915(a) diesel certification training off site from Randy Tatton, owner of Mining Health and Safety Solutions, Inc. Mine specific, follow-up training was completed by the mechanics during an on the job training (OJT) period. The West Ridge training utilized Wagner and Atlas Copco examination check off sheets as training

materials, (Atlas Copco purchased Wagner Mfg.). Once trained, mechanics were assigned specific diesel equipment for the required the 30 CFR § 75.1915(f) inspections. A review of diesel mechanic training records indicated the training was completed for those mechanics currently assigned to repair and perform 30 CFR § 75.1914(f) examinations and tests of the diesel fleet operating at West Ridge Mine.

On September 15<sup>th</sup> at approximately 9:00 a.m., Richard Evans, Certified Diesel Mechanic, was assisting Darren Bradley, Certified Diesel Mechanic, with the changing of a carrier bearing on the second Wagner ST-2DS can setter, company number 5. The second can setter was in the face area of the 23<sup>rd</sup> West. The Wagner involved in the accident, number 24-43, was being operated as a fork lift in the same area. Evans stated he was assigned to the 24-43 Wagner for weekly examinations. When Evans saw the 24-43 unit operating near the #5 Wagner, he stopped it and performed the required 30 CFR § 75.1914(f) examination for the week. During the interview of Evans, he stated that he did not see anything out of order on the 24-43 Wagner and recorded this in the weekly diesel record. That examination was later recorded in the mine's weekly diesel examination record as "ok." Accident investigators reviewed weekly permissibility records back to August 24, 2014, and found that the only defects noted were fire suppression caps being replaced and the scrubber being shut down so that adjustments could be made.

Company policy required Wagner operators to conduct a pre-operational examinations to comply with 30 CFR § 75.1914(e). The company directed examiners to fill out a company provided examination card which would show the operating condition of the Wagner. Once examined, the pre-operational examination card was forwarded to management. For each shift, one of these cards should have been filled out for the Wagner that was operated.

West Ridge miners randomly submitted these examination cards. The records of these pre-operational examinations were not comprehensive for the shifts that Wagners were operated. The accident investigation team reviewed the previous six months of Wagner pre-operational examination records, (March to September 2014), including those done by Ramirez. Those records that were available for review generally did not contain defects listed that affected safety.

During the two shifts prior to the accident, the 24-43 Wagner was used to handle pallets at the same location Ramirez was assigned. Pre-operational examination cards, filled out on the day shift and swing shift on September 15<sup>th</sup>, by mobile equipment operators Josh Patterson and Zeb Farmer, showed no defects on the machine.

The mine operator's preventative maintenance of the diesel equipment at this mine lacked comprehensive oversight. When asked how long the steering rod had not been maintained, as described above, Travis Graves, Maintenance Manager, and Evans the diesel mechanic assigned to conduct weekly examinations on the Wagner, stated they did not know. When asked if they could remember the modified handle assembly ever not being on the steering rod, they both replied "No."

The Wagner non-compliance should have been obvious to a trained examiner. The observations of accident investigators showed that this mobile diesel equipment, continuously operated in a mining environment, was not maintained as well as the pre-operational examination cards and weekly permissibility records indicated. The defects found were both contributory and non-contributory to

the accident. Both Wagner can setters required several days of repair work, underground and in the surface shop, to make them compliant with 30 CFR § 75.1914.

### **Work Experience and Training**

Alejandro Ramirez (victim) was employed as an experienced miner from Price Mine Services in 2007. His resume states he had "Qualifications" as, among other jobs, a "Can Setter." Ramirez initially worked at the mine before it became West Ridge in August 2008. He received initial training on the Wagner ST-2DS on May 5, 2007, with training performed by Randy Hunt, Foreman.

At West Ridge, Ramirez received additional task training in longwall recovery support activities in 2013 and twice in 2014. This included training on installing roof support for shield extraction, and equipment operations related to the longwall mining machine removal and installation.

From March 2009 through September 2014, West Ridge moved their longwall mining machine 14 times. Records show that Ramirez operated mobile equipment, including, but not limited to, the Wagner can setters on most moves.

Interviews with West Ridge management and task trainers support the fact that Ramirez was proficient when operating the can setter.

MSHA Education Field Services further conducted a review of the training of all persons with involvement in the accident.

### **Toxicology**

Toxicology did not indicate anything abnormal in the victim.

## ROOT CAUSE ANALYSIS

A root cause analysis was conducted to identify the causes of the accident that were correctable through reasonable management controls. Listed below are the root causes identified during the analysis and the corresponding corrective actions implemented to prevent a reoccurrence of the accident.

1. Root Cause: Mine management failed to ensure that proper pre-operational examinations were completed prior to diesel equipment being placed into service. The Wagner involved in the fatal accident was found with a major steering defect after the two most recent pre-operational examinations were conducted and no defects were found.

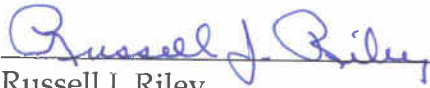
Corrective Action: Management has instituted a more comprehensive preventative maintenance program that addresses repair and examination requirements, including monitoring the weekly and pre-operational examinations. The training has been completed. Accountability for the equipment inspections has been emphasized in a new, written program.

2. Root Cause: Mine management failed to ensure a proper and comprehensive weekly exam was properly performed.

Corrective Action: Management has instituted a more comprehensive preventative maintenance program that addresses repair and examination requirements, including monitoring the weekly and pre-operational examinations. Training has been completed. Accountability for the equipment inspections has been emphasized in a new, written program.

## CONCLUSION

The fatal accident occurred when the victim's upper body was outside the operator's compartment as the machine articulated. Contributing to the accident was a history of significantly deficient pre-operational and weekly examinations. If these examinations had been performed correctly, the Wagner would have been required to be removed from service and repaired prior to the accident.



Russell J. Riley  
District Manager



Date

## ENFORCEMENT ACTIONS

1. A 103(k) order was issued on September 16, 2014.

A fatal injury occurred in the 23rd East Long Wall Section, MMU 003. The miner was fatally injured by being caught in the pivot point of the ST 2DS Wagner Can setter Company # 24 -4 3, Serial # SA03218 . A verbal 103(j) order was issued to withdraw the miners from the mine and thereby protect the health , safety and life of any person and to preserve any evidence. This verbal issuance is now reduced to writing.

2. Safeguard 8483141 was issued on October 2, 2014, pursuant to 30 CFR § 75.1403

The Wagner ST-2DS Tractor/Scoop was not provided with a system to keep all miners body parts within the safety confines of the operators cab. The mine had a fatal accident related to the miner's body being extended beyond the confines of the operator's compartment and into the articulation pinch point, thereby receiving crushing injuries.

The Wagner ST-2DS Tractor/Scoop has multiple functions, depending on which attachment is employed, to include, but not limited: LHD Scoop with two yard bucket, Fork Lift, and Can Setter. The units traverse or work on a grade that averages 12 percent.

This is a Notice to Provide Safeguards requiring all Wagner ST-2DS Tractors/Scoops, without regard to configuration, to be provided with a means to restrain equipment operators to the confines of the operators cab and all of the components must be maintained in usable and operative condition. No one is allowed to enter or exit the cab when the pump motors are running.

Standard 75.1403 was cited 6 times in two years at mine 4202233 (6 to the operator, 0 to a contractor).

3. 104(d)(1) citation 8483142 was issued for a violation of 30 CFR § 75.1914(a).

On Tuesday, September 16, 2014, at approximately 1:39 a.m., an underground, mobile equipment operator was fatally injured when the Wagner ST-2DS (S/N SA03P0217, Company No. 24-43, Approval no. 31-116-1), mobile diesel can setter he was operating, articulated and crushed him. The steering assembly in the operator's compartment was not properly maintained. Original steering components included a ½ inch rod extended through a slotted, convex guard plate with a knob threaded on to the end of the rod. When the knob was lost, a ½ to ¾ inch pipe bell reducer was installed on the end of the rod. Also, a ⅝ inch ring lift bolt was installed in the bell reducer. The threads didn't match so plastic tape was wrapped around the control rod, bell reducer, and ring lift bolt to hold everything in place.

As the improvised assembly loosened, more tape was wrapped until the assembly was 1.315 inch in diameter and the tape extended from the guard plate slot to the base of the ring. A frictional contact between the tape and convex guard was created. This frictional contact

combined with the weight of the improvised assembly, held the steering rod down in the left articulating position. When removed and weighed, the control rod, eye bolt, pipe fitting, and tape weighed 15.2 ounces, whereas the manufacturer's knob only weighed about 1 ounce. This condition contributed to the accident.

Once the added material was removed, the steering rod was re-tested and found to function according to the manufacturer's specifications.

The mine operator engaged in aggravated conduct constituting more than ordinary negligence in that he failed to conduct adequate examinations according to 30 CFR, the manufacturer's examination criteria, and the company's examination criteria. The mine operator also accepted a condition that contributed to the accident, which existed for several weeks. This condition was obvious to the certified mechanics who conducted the required examinations, but no measures were taken to document or remove this hazard. Instead, miners were assigned to operate the machinery in the defective condition after the inadequate examinations were conducted.

This violation is an unwarrantable failure to comply with a mandatory standard.

4. 104(d)(1) order 8483150 was issued for a violation of 30 CFR § 75.1914(f)(1)

An inadequate weekly examination was conducted on the Wagner ST-2DS (S/N SA03P0217, Company No. 24-43, Approval no. 31-116-1) mobile diesel can setter for the calendar week of September 14 to 20, 2014. The weekly examination was conducted on September 15, 2014, at approximately 9:00 a.m. and the examiner documented that no defects were found during this examination.

The equipment operator was fatally injured on September 16, 2014, when this mobile diesel can setter articulated and crushed him.

During the fatal accident investigation, this machine was inspected and found to have a significant safety hazard (see reference citation 8483142). This condition was obvious to the certified mechanics who conducted the required examinations, but no measures were taken to document or remove this hazard. This condition existed for several weeks.

The weekly examination criteria are included in the machine manufacturer's examination checklist (sheet 6 of 10). This checklist is used at this mine as the basis for the diesel mechanic's equipment specific training. These criteria were part of the weekly diesel equipment examinations.

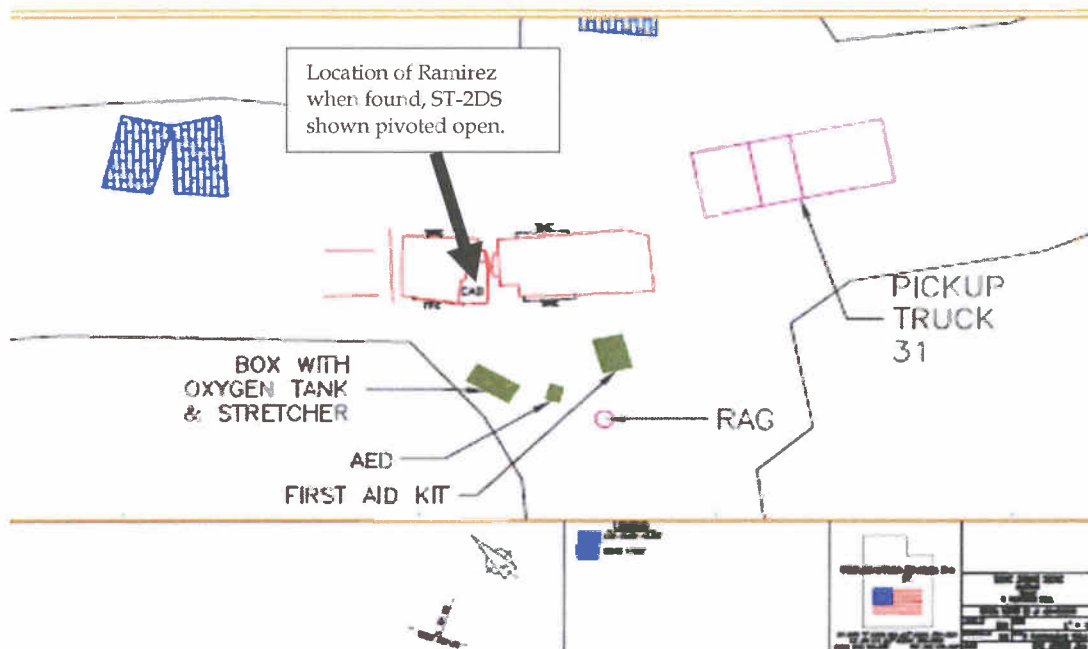
The mine operator engaged in aggravated conduct constituting more than ordinary negligence in that he failed to conducted adequate examinations according to 30 CFR, the manufacturer's examination criteria, and the company's examination criteria. The mine operator also accepted a condition that contributed to the accident, which existed for several weeks. This condition was obvious to the certified mechanics who conducted the required examinations, but no measures were taken to document or remove this hazard. Instead, miners were assigned to

operate the machinery in the defective condition after the inadequate examinations were conducted.

This violation is an unwarrantable failure to comply with a mandatory standard.

## Appendix A – 23<sup>rd</sup> West Longwall Section Overview

### Canyon Mains (cross cut 11, #2 Entry)



## APPENDIX B – Persons Participating in the Investigation

### West Ridge Resources, Inc.

David W. Hibbs.....	President, West Ridge Resources, Inc.
Darrell A. Lenard .....	Superintendent
Angelo P. Konakis.....	General Mine Foreman
Jason W. Hardin, Esq.....	Fabian Law
Hubert Wilson.....	Safety Director
Tad Fausett.....	Miner’s Rep and Safety
Mike Porter.....	Safety Rep
Phillip Cox.....	Shift Foreman
Gary Sitterun.....	Maintenance Superintendent
Travis Graves.....	Maintenance Foreman
Gene Birch.....	Diesel Maintenance Supervisor
Richard Edwards.....	Mechanic
Claude Duncan.....	Mechanic
James Newman.....	Engineer
Rod Andrews.....	Engineer
Mitch Childs.....	Engineer
Zeb Farmer.....	Mobile Equipment Operator

### Utah State

Kent Houghton.....	Utah State Labor Commission, Office of Coal Mine Safety
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### Mine Safety and Health Administration

Thomas E. Barrington.....	Coal Mine Safety and Health Inspector
Gary J. Wilson.....	Coal Mine Safety and Health Inspector
Dwayne K. Brown.....	Coal Mine Safety and Health Diesel Specialist
Kent L. Norton.....	Education Field Services
Vernon Marvidikis.....	Coal Mine Safety and Health Inspector
Sydel R. Yeager.....	Coal Mine Safety and Health Ventilation Specialist
Gary L. Clark.....	Mechanical Engineer MSHA Approval and Certification Center

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00 22 2014 07 24

## Wagner Steering Stops



Steering stop on No. 5 Wagner ST-2DS



Missing steering stop, Wagner 24-43



Wagner in its open, in line, articulation position.



Wagner frame to frame closure as measured at 3 1/2 inches.

## APPENDIX D - Victim Information

### Accident Investigation Data - Victim Information

**U.S. Department of Labor**

Mine Safety and Health Administration



Event Number: 4 4 8 2 8 2 5

Victim Information: 1

1. Name of Injured/ill Employee: <i>Alejandro Ramirez</i>		2. Sex: <i>M</i>	3. Victim's Age: <i>46</i>	4. Degree of Injury: <i>01 Fatal</i>	
5. Date(M/DD/YY) and Time(24 Hr.) Of Death: <i>a. Date: 09/16/2014 b. Time: 1:39</i>				6. Date and Time Started: <i>a. Date: 09/15/2014 b. Time: 23:00</i>	
7. Regular Job Title: <i>050 Shuttlecar Operator</i>			8. Work Activity when Injured: <i>058 Operating a Wagner Scoop Tram</i>		9. Was this work activity part of regular job? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
10. Experience		a. This		b. Regular	
Years	Weeks	Days	Years	Weeks	Days
Work Activity: 0	21	5	Job Title: 5	31	0
c. This		d. Total		e. Total	
Years	Weeks	Days	Years	Weeks	Days
Mining: 10	36	0	Mining: 10	36	0
11. What Directly Inflicted Injury or Illness? <i>105 ST-2DS type scooptram, modified w/ forks</i>			12. Nature of Injury or Illness: <i>170 Crushed in the articulation point</i>		
13. Training Deficiencies:					
Hazard:		New/Recently-Employed Experienced Miner:		Annual: Task:	
14. Company of Employment: (if different from production operator) <i>Operator</i>					
Independent Contractor ID: (if applicable)					
15. On-site Emergency Medical Treatment:					
Not Applicable:		First-Aid: <input checked="" type="checkbox"/>		CPR: <input checked="" type="checkbox"/> EMT: <input type="checkbox"/> Medical Professional: <input type="checkbox"/> None: <input type="checkbox"/>	
16. Part 50 Document Control Number: (form 7000-1)			17. Union Affiliation of Victim: <i>9999 None (No Union Affiliation)</i>		