

**Western Region
Of
Underground Master Mechanics
September 27, 2007**

WRUMM Staff
Open – Chairman
Brent Saddoris – Vice Chairman
Ben Lupercio – Secretary
Steve Volkert – Treasurer

Place: Winnemucca Convention Center
City: Winnemucca, Nevada

Treasures Report

We have combined bank accounts with the surface master mechanics group. The Surface and Underground officers felt this was a more effective way to collect dues and operate the organizations. We currently have \$8,988 in the combined bank account.

The Surface and Underground Master Mechanics organizations have lost their non-profit status. The organization status grant has expired and the officers are currently working to understand the benefits, if any, to renewing the grant. Carlos is going to check with an accounting firm to get more information.

Best Safety Practices and Best Maintenance Practices

The underground master mechanics meeting was well attended. We had representation from several Newmont sites, Stillwater Mining and Barrick Goldstrike. Presentations can be viewed on the master mechanics web site www.mater-mechanics.org

Safety: Most every mine is starting the day with a brief safety discussion. Stillwater has safety stand down meetings on an ad-hoc basis. If there are rising safety concerns in the mines or if there is significant events across the mining industry, they will hold a safety stand down meeting. Management will meet with all crews to discuss the topic and hear concerns from the miners. This has lead to Team Safety Representatives (TSR) through out the mines. The TSR is a miner working in the field and becomes the central point for the crew miners to bring up safety concerns. The TSR team has been working to update various procedures to ensure they are applicable and safe.

Most all mines require an area work place inspection; however some are more formal about the inspection and require that the inspections be formally documented. Additionally, some mines are requiring a formalized task audits. While this is a significant part of any supervisors' responsibility, the formalized audits help to ensure that both the supervisor and the technician take the time to recognize the importance of working safe. It was also noted that while most mechanics are familiar with work place inspections in the shops, they should also be trained to inspect work areas in the mine.

Our field mechanics are exposed to the same changing ground conditions as our miners and should be coached to perform this task just like a miner. This may require some additional training, but is well worth the effort.

Barrick Goldstrike has moved to a zone mining method in which miners are assigned to work in a certain section of the mine. Previously the miners were assigned to a task and could be working in any area of the mine. With zone mining, the miners are much more familiar with the areas they are working because they see the same areas every day. It is felt that this has improved the ground conditions in the mine.

Newmont Midas has made adjustments to the remote controls for the mucking equipment. The remote controls have now been arranged to stop working and shut down the mucker if the vehicle comes within 20 feet of the operator.

Maintenance: Newmont Gold, One Nevada; A maintenance/procurement Continuous Improvement initiative has been implemented recently. This project was an effort to get better communications and improved team work from the purchasing, warehousing and maintenance departments. An audit of procurement procedures from all the Nevada mines was performed and the best practice from each site was incorporated into a standard procedure for all the Nevada sites. Each site has a daily review of the planned maintenance work to identify reasons for which work may not have been completed. All groups are represented in the daily review. As issues are identified in these reviews, individuals are assigned tasks to help resolve the issues. The project has improved the team work from these groups and provided a platform to establish KPI's that can be used to make better decisions for maintenance planning and purchasing practices.

Another project from One Nevada was standardization of the oil analysis process. The oil analysis software has been standardized and the alarm levels are currently being adjusted. As oil sample results exceed alarm limits, corrective action recommendations are made. The alarm limits and corrective action recommendations have also been standardized as these two functions are provided through a single outside supplier. This has allowed for consistent corrective actions which should improve overall performance and use of the oil analysis results.

Barrick Goldstrike has implemented focused equipment maintenance groups. The maintenance groups are broken up into small teams of mechanics that work primarily on a single equipment group, such as haul trucks. The mechanics have become more familiar with the individual pieces of equipment and work execution is much improved.

All mines have increased activity in the DPM compliance area. It was mentioned that in most all cases, the DPM issue is getting additional resources such as engineering and Industrial Hygienists. The additional resources have collectively help improve emissions at most every site. Most all sites have been testing and/or using some form of alternative fuels, Stillwater is running a 50% bio-fuel blend and plans to continue even through the winter months. Some mines have found that the alternative fuels have created complacency in mechanics. As equipment was reported to have low power, mechanics

would immediately suggest that the problem was the fuel. In most cases, the low power concerns have been directly related to a mechanical part failure on the engines.

Integrated Approach To Reducing Underground Diesel Emissions – Dave Starbuck – Newmont

Dave Starbuck gave a presentation on various strategies to reduce diesel emissions. The key elements in these strategies were; clean burning engines, engine maintenance, alternative fuels, ventilation rates, enclosed environmental cabs, exhaust filters, NOx gas devices, and administrative control. It was noted that all of these items may not be required and each mines needs are very specific. To help determine the appropriate applications, it was noted that the involvement Industrial Hygiene department was very useful in determining current state as well as results from various testing. The presentation will be posted on the WRUMMA website www.mater-mechanics.org

One Eye Industries – Magnetic Filtration Enhancements

One Eye Industries gave a presentation on magnetic filtration. This company builds a number of magnetic devices that work in conjunction is conventional filtration systems. The magnets have a very strong field of pull and assist your filtration system rather than replace them. The filtration devices can be a magnetic pad placed on the outside of your filter housings to a magnetic screen place inside the system. They also make magnetic plugs that can be custom made to the end users specifications. One Eye Industries fell they have an advantage over standard magnetic plugs due to the custom size and strength of the magnets they build. For more information you view the web site at www.oneeyeindustries.com

Contamination Control – Allen Moore – Cashman Equipment

Allen Moore gave a presentation on contamination control. The benefits of contamination control can be seen in component life. Studies have indicated that there is a significant improvement in component life if a person can improve oil cleanliness levels. Additionally, equipment operating speed is optimized when oil cleanliness specifications are obtained. Allen mentioned a several items a person can do to improve contamination control; clean shops, use drop cloth as opposed to floor dry to clean up spilled oil, and when building a hydraulic hose, swab out hydraulic hoses followed immediately by cap and/or plugs for the end of the hose. Allen's complete presentation can be seen on the mater mechanics website www.mater-mechanics.org

P&H Business Update – Jason Reynolds, Jeff Atkin and Terry Haygood

P&H gave the group an update of their current business arrangements. P&H has purchased Machine Repair International's Elko facility. The Elko West End facility is now dedicated to welding and warehousing and the East End facility is dedicated to machine work and equipment rebuild/repairs. P&H has alliances with Dux Machinery, and Mining Technologies International (MTI). P&H has offers mechanical technicians,

machining work and in shop equipment repair/rebuilds. Additionally, they have certified weld inspectors and Auto Cad capabilities. The complete presentation can be seen on the master mechanics web site www.master-mechanics.org

Next Meeting Presentations

TBA – If anyone would like to make a suggestion or volunteer to make a presentation please let me know.

Next Meeting Vendors

TBA – If anyone has any suggestions, please let me know.