

Rocky Mountain Master Mechanics
April 25 & 26 2013
Rapid City, SD

Bill Ruff, Co-Chairman Mobile
Miles Dockter, Sec. Treas.
Kevin Sondrol, Director

Tony Geffre, Co-Chairman Plant
Tom Phillips, Director
Tom Henaghan, Director

Business session

- Scholarship recipients announced
 - Dustin Seefeld, Bismarck, ND
 - Brooke Renner, Zap, ND
 - Derek Lutonsky, Gillette, WY
 - Dalton Mellmer, Reeder, ND
 - John Maffei, Gillette, WY
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- Next meeting dates announced
 - December 5,6, 2013, Rapid City, SD, Holiday Inn
 - May 8,9, 2014, Rapid City, SD, Holiday Inn
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- Election of Mobil Co-Chairman
 - Bill Ruff elected to replace Kelly Hardy

Kelly has retired from the mining industry and from many years of loyal attendance at our meetings having served the past 4 years as the Mobile Co-chairman.

Major Metals

www.majormetalservice.com 307-685-3301
Kodi Majors kodim@majormetalservice.com
Will Morgan majormetalservice@hotmail.com

- Located in Gillette, Wyoming
- 23 years of experience
 - Serving mining, construction, fabrication, sand & gravel, private individuals
- Visit their website for a full description of their products and services

Open Discussion

- Be sure and check the MSDS on any cleaning products as some have been found to be highly flammable or to have toxic fumes when heated.
- MSHA is starting to require that out of service equipment be parked with battery cables unhooked and taped up or some other mechanical means to prevent the machine being started.
- To monitor operator fatigue one operation is using a device that focuses on an operator's retina and sounds a warning if there is no eye movement after a set period of time.
- 930 Komatsu strut issues
 - Dash 1&2 machines lower hours than dash 3&4
 - Some locations seeing 25,000 hours new ½ that on rebuilds
 - Other locations seeing much reduced hours
 - One suggestion to increase life was to try and find a filtration system for each wheel position
- LeTourneau dogbone problems
 - General consensus that OEM dogbone has inferior machining
 - One location having replacement dogbones made by a machine shop with positive results
- Several locations experiencing frame problems with Letourneau's
 - Lots of welding
 - No solutions suggested
- Question if anyone else having LeTourneau steering cylinder failures?
 - Suggestion made to check steering transducer adjustment
 - Machine could be contacting steering stops too hard
- 2350 LeTourneau front tire issues
 - Problem is overheating
 - May try nitrogen to solve
 - May also try tire chains
- Any problems with QSK 60 exhaust bolts breaking?
 - Yes, especially with dual stage turbos
- Any problem with injectors in 793F's with C175 engine?
 - Suggestion to keep fuel very clean
- Anyone using Lane Crandall for filter analysis?
 - Yes, several with good results

- Any issues with 3500 series engine oil filters coming loose?
 - Yes, many locations
 - Suggestion to use D-10 filter stud with long starting taper
 - Cut tapered end so stud is 47 mm in length
 - Install stud so threads bottom out when stud is tight
 - Believe part # is a 2W8225
- Anyone using their own scales to double check truck payload systems?
 - No discussion
- Several having problems with MTU engine harnesses
 - Problem may be from harness rubbing on incorrectly sizes clamps
- What is everyone getting for engine life on 16M's?
 - Varies from 12,000 to 18,000 hours
- What are the C-27's in D-10's getting for engine life?
 - New 18 to 20 thousand, less on rebuilds
- B&G 3508's still doing well
 - One location averaging 398,000 gallons fuel burn
- 3500 engine issues
 - Some still having camshaft failures
 - Others have seen problems with reman heads
 - After being resurfaced lifter bores are not concentric
- Atlas Copco drill engine drive coupler failures
 - Possible cause is bad injector causing engine to run rough
- Be careful not to mismatch Deutz connector components
 - Connectors will get hot and melt
- Any solution to tire sensor coming loose inside tire?
 - One suggestion to use 60lb magnet

Hedweld

www.hedweld.com.au

Mark Gream mark.gream@hedweld.com.au

- Manufacturers and suppliers of Safe-Away and Trilift systems
- Safe-Away
 - Ladder and stairway systems for virtually all large earth moving equipment
- Trilift
 - Wide range of equipment component handling systems

- Visit their website for full range of products and information

All State Fire Systems

www.allstatefireequip.com

Yvonne Damon

ydamonasf@verizon.net

972-412-0770

- Fire equipment training
- Class is designed to help employees, operators and mechanics understand fire suppression systems and how they function.
- For further information visit their website

Cummins - Robust Design Improvements

www.cummins.com

Evelynn J. Stirling

evelynn.j.stirling@cummins.com

- Group formed to address issues with;
 - Connecting rod failures
 - Valve tip failures
 - Main bearing failures
 - Exhaust manifold bolt failures
 - Cylinder head gasket leaks
 - Oil leaks
- They feel connecting rod, valve tip and main bearing failures have been addressed
- Exhaust manifold bolt failures
 - Holes in manifold found to be too small
 - Did not allow for manifold expansion
 - Also a problem with misalignment of manifold components
 - Centering tool prints are available from Cummins Rocky Mountain
- Cylinder head gasket leakage
 - Gasket material has been found to be degrading
 - No fix at this time

- Oil leak issues have been addressed with;
 - Hand hole cover gaskets
 - Oil pan adapter gaskets
 - Header plate and oil cooler posts
 - Lube filter head
- Still working on accessory drive seal issues
- Problems with QSK injector seizures
 - Found to be result of improper finish of internal components
 - Injector diagnosis service tools and procedures are available
- Tier IV
 - Have found clean fuel to be more important than ever before
 - Info on DEF and other Tier IV issues at
 - www.integer-research.com

Reichdrill

www.reichdrill.com

Mark Benedict

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Mark Strittmatter

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- Made in the USA in Phillipsburg, PA
- Current concentration of drills east of Mississippi
- Komatsu is now their distributor in Rocky Mountain region
- Company was founded with the following standards
 - Simplicity of design
 - Ease of operation and training
 - High availability and production
 - Long life hydraulics
 - Commonality of parts
 - Accessibility of components
 - Technical and parts support
- Complete product line information available on their website

Phillips 66 Tier IV Oils and Fluids

www.phillips66.com

Phil Olsen phil.g.olsen@p66.com

- Oils have been upgraded in correlation with engine emission improvements
- Only three categories of oil still produced
 - CJ4, CI4, CH4
 - CJ4 required for engines with exhaust aftertreatment
 - CJ4 also compatible with older engines
- Next oil category will be PC-11
 - Available 2015 and beyond
 - Will be the new standard for engines with exhaust aftertreatment
 - Will possess greater shear stability along with thermal improvements
 - Will be biodiesel compatible
 - Beyond that regulations will drive the next engine oil category
- UREA fluids
 - Injected in exhaust aftertreatment to convert NOX into nitrogen and water
- UREA is corrosive
 - Plastic or stainless steel tanks and containers required

Caterpillar 16M & 24M Issues

Caterpillar TIER IV Information and Schedule

Brandon Reed and Jared Black

Their presentations will be available on our website www.rmma.org