

# UPTIME'S **2010** **PEN** PROGRAM OF THE YEAR



## Peabody Powder River Services North Antelope Rochelle Mine Program Highlights

North Antelope Rochelle Mine (NARM) is the largest production coal mine in the world. Our parent company, Peabody Energy, is the largest coal producer in the world. Being world class is what our company is about, and striving to be first in class is what propels us forward. Teamwork is our core. The Reliability Department at NARM is involved with every function of the mine from production to routine maintenance, and is home to Oil Analysis.

Knowledge and training play a key role in our program. Our oil analysts have an average of over 24 years of mechanic

experience and hold Level I and II certifications in Machinery Lubrication Analysis (MLA). Each have also had advanced training in failure analysis from Caterpillar. This experience and training pays off where the rubber meets the road; understanding and identifying the actual machine failure.

The NARM oil analysis program is composed of: oil analysis, hydrocarbon management training, filter debris analysis, acoustic

analysis, and failure analysis. From a traditional oil analysis approach, over 1500 components are monitored in our mobile fleet. Samples are collected by technicians and sent to Oil Analysis Lab, Inc. in Spokane, WA on an almost daily basis. With the introduction of Hydrocarbon Management training, our technicians are kept up-to-date on contamination prevention, ISO code standards and expectations, and sampling procedures. In March 2008 we began filter debris analysis which almost immediately increased the average life of monitored components. In fact, there are cases in which the average life has doubled through an in-depth understanding of equipment

combined with forensics from filter debris analysis. Somewhat new to the site is utilizing acoustic analysis to find leaks and weak spots in air chambers. When an oil sample shows high silica, an SOP is generated to check for air box leaks. Failure analysis plays a role in every aspect of the program as it is crucial to understand the origin of every tiny particle in the oil or filter.

As mentioned above, TEAMWORK is our core. While there is a defined oil analysis department at NARM, the success of the program overall depends on the function of multiple groups. Without assistance from site planners, technicians, team leaders and supervisors, as well as our close relationship with Oil Analysis Lab, the program at NARM could never reach the level currently attained.



**Front Row From Left:** Ted Lazarus - Oil Analysis, Layton Villalobos - Vibrations, Keith Haukereich - Oil Analysis, Jim Hance - Oil Analysis. **Back Row From Left:** Craig Brasfield - Reliability Manager, Glen Huseeth - Vibrations, Dave Natchke - Machine Health, Troy Stuart - Reliability Engineer, Brian Martinson - Machine Health

*Best  
 Lubrication  
 Oil Analysis  
 Mobile  
 Fleet*

### North Antelope Rochelle Mine Oil Analysis Equipment and Software

- Spectro Inc. Fuel Sniffer
- MP FILTRI LPA2 Portable Laser Particle Counter
- Stereo 100x Boom Microscope with Digital Camera
- Cole-Parmer Patch Kit
- Exxon Mobile Glycol Detection Kit
- Monarch Instrument UltraPro AG500 Ultrasonic Leak Detector
- Everest VIT Borescope
- Dingo Trakka Version 3.3 Software
- SAP Software
- Ivara EXP Software
- Modular Mining Software

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