

Marketing Application Publication

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Application	Coal Mine
Location:	Columbia
Product:	FBO and RV Series Filters



Why was Racor chosen as the solution:

Parker Racor hydrocarbon filters are being used to filter more than 12 million gallons of diesel fuel per month in the biggest sky-open coal mines in Latin-America.

Located on the North coast of Colombia is one of the most important coal mines supporting the expanding Colombian economy. The demand for global competitiveness in reliability, availability and quality

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of cleaner and environmentally friendly production processes are on the rise. Therefore, the handling of diesel fuel for high power engines has driven companies to find engineering alternatives for one of the conditions that has a major influence in the cost of operating a coal mine: diesel fuel contaminated with solids, sediments and water diesel fuel.

Five years ago, international companies (Drummond, BHP Billiton and Glencore) began the installation of Parker Racor hydrocarbon filters with the support of the local distributor, Full Filters de Colombia, with the purpose of cleaning the diesel fuel that they were buying from their providers. This program began with the installation of filtration systems from 100 to 1,000 gpm located in the fuel storage tank farm. Later, seeing the excellent results of the Parker Racor hydrocarbon filters, they decided to complete the installation with filtration systems for tank dispatch and diesel recirculation systems,



achieving excellent results in their engine performance. The mining equipment used by these companies include:

- Caterpillar, off highway trucks 793C, 793D, 793B, 777C, 777D.
- Caterpillar tractor type D11R, D10R.
- Hitachi Excavator 3500.
- Komatsu excavator PC 8000, PC 4000.
- Caterpillar Motor graders 16H.
- Hitachi EH 5000 off highway truck.



ENGINEERING YOUR SUCCESS.



A Distributor/Customer Partnership for Success:

1. Installation of Parker Racor hydrocarbon coalescers, separators, and pre-filters with high efficiency and high capacity media.
2. An excellent maintenance program.
3. Premium customer service.
4. Design and engineering support.
5. Contamination control programs.

Product Information:

Parker Racor filtration technology used in these applications was developed for aviation fuel. The same API certified technology is used to filter other fuels such as diesel and gasoline achieving excellent results for customers globally.

The results obtained were evaluated with certified laboratories. These companies were handling diesel fuel contaminated with 30 mg/l of sediments and 400 ppm of water. After the installation of Parker Racor hydrocarbon filters the diesel fuel is at 6 mg/l and 70 ppm average of water. The improvement in diesel fuel cleanliness levels resulted in:

- Life extension of Caterpillar 3,516 engines to 23,000 hours.
- Lower maintenance cost for all electronic injection systems.
- Life extension of on board diesel fuel filters.
- More reliability and availability of mining equipment.
- Lower soot index levels.
- Diesel fuel consumption optimization.

The engine oil has the major task of cleaning the engine of combustion process deposits. A clean and dry diesel fuel will generate a lower level of undesirable combustion by-products in a well maintained

engine extending lube oil change-out intervals. The most beneficial result was on the Caterpillar 3516 generators. In this application, the customer achieved an engine oil and oil filter life extension from 250 hours to 1,000 hours.



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