

ADVANCED POWER SYSTEMS INTERNATIONAL INC.

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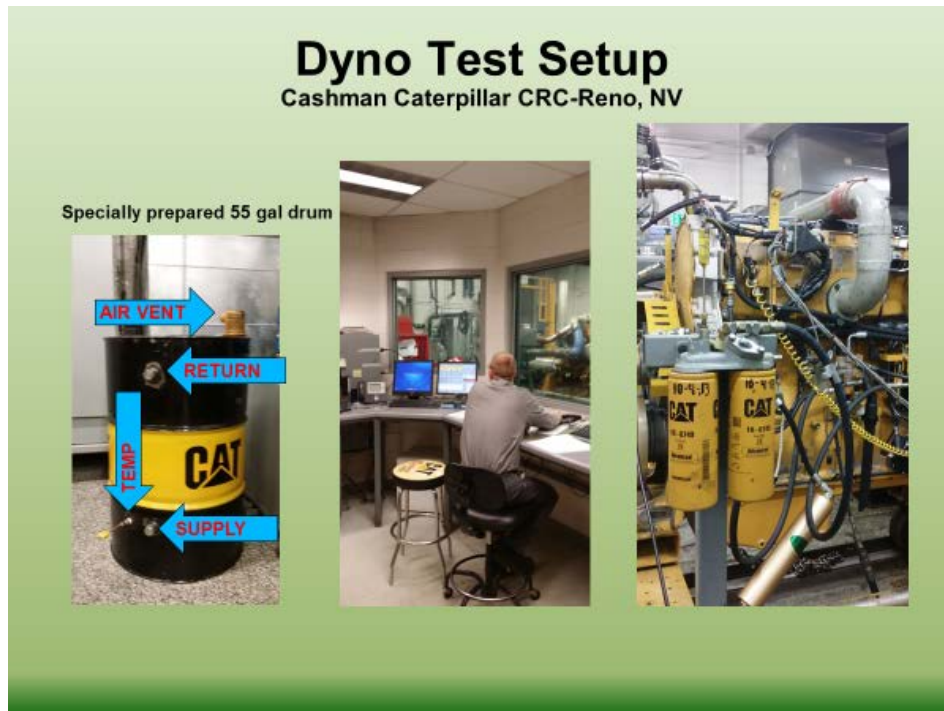
Fitch Fuel Catalyst ELIMINATES dPm

Client: U.S. Subsidiary of Large Canadian Mining Company, Beatty, Nevada

Engine: Caterpillar C-15

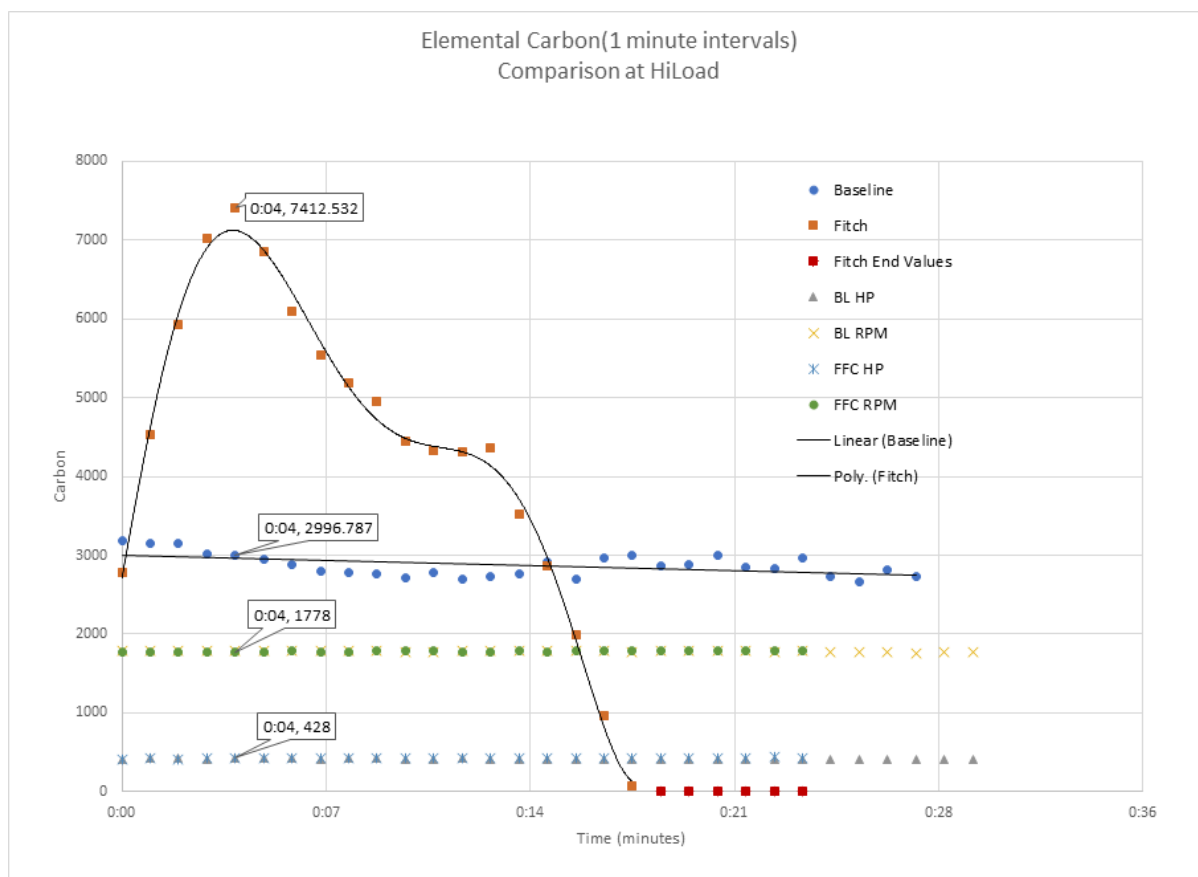
Fitch Model: F150HDG Commercial In Line

Results: Particulate matter (dPm) documented at zero after installation of Fitch Fuel Catalyst



Test was conducted for Nevada gold mining subsidiary of large Canadian mining company. Fuel supplied from 55-gallon drum was pre-circulated through Fitch F150HDG (gold cylinder) in front of engine in 3rd photo from left above. FLIR Airtec dPm monitor is standard monitoring equipment for miners working in underground mines. Complies with NIOSH and MSHA standards for measuring dPm in real time.

Fitch installed



Example of Diesel Particulate Reduction

The above graph plots Elemental Carbon, a marker for diesel particulates, dPm, accepted by the Mine Safety and Health Administration (MSHA). This is on a Caterpillar C-15 engine running at Hi-Load controlled by an engine dynamometer. Engine RPM and horsepower pre and post Fitch are approximately the same. Pre-Fitch(baseline) EC are very steady at about 3,000 units over the 30-minute test. With the Fitch unit (model F150), there was a sudden increase of 150% in the readings within 4 minutes of starting the retrofit run. This is interpreted as engine cleanout due to better combustion of the fuel. Over the next 15-minutes levels dropped significantly to zero detectable elemental carbon.