



**FILTER
TECHNOLOGY**

cleaner fluids mean better business

CASE STUDY



Bulk Filtration Case No : 5 - 6 - 3

Bulk Fuel Filtration : Hanson, Kilmore Quarry

Hanson Kilmore

Hanson fitted a Filter Technology Australia FM440 fuel delivery system to their bowser at the Kilmore Quarry. It was pointed out prior to fitting the unit that the site was an extremely dusty environment and that every 100 litres of fuel drawn from the Diesel tank was replaced with 100 litres of dusty air.

We took some fuel samples before and after the fitting the fuel delivery system and found the fuel particulate count reduced from ISO 22/17 to 16/13, which is 96% cleaner. As part of the installation Filter Technology fitted FMS2 Breathers to all of the bulk tanks on site oil and fuel.

Micron	Before	After	Difference
>4	52,989	3,354	93.6 %
>6	32,322	569	98.2 %
>10	6,188	136	97.8 %

The site had a 775E CAT dump truck, which was experiencing trouble with fuel injectors prior to fitting the fuel delivery system. A reconditioned set of injectors were installed at the same time as FTA fitted the FM 440F fuel pump filtration system. The following month Kilmore Quarry again experienced trouble with failing fuel injectors on the same 775 dump truck, it was suggested that the fuel was dirty and caused the fuel injectors to fail, the replacement cost of the injectors would be \$1,200 each or \$ 15,000 for the set.

The site manager pointed out that they had fitted the FTA FM 440F system at the same time as the injectors were fitted and provided them with a copy of the fuel analysis report that proved the fuel was at ISO 16/13 which was within CAT's recommendation.

The injectors were replaced under warranty saving Hanson \$15,000.



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Oil Test

This Report No: 235 564
Date: - - - - -
Report No: 235 965 236 234
Master Reading: 00m
Oil No: - - - - -
Oil Change: 0

	30-Apr-05	25-Apr-05
235 965	235 965	236 234
Oil	0m	0m
No.	-	-

Client: Filter Technology Australia Pty Ltd
Attention To: 500 MEDLEYTON - 71 Racecourse Road, Rutherford
VIC
Sample Location: Hanson Kilmore Fuel
Oil Type: DIESEL FUEL

Particle Analysis: 4 um Count: 52989
8 um Count: 32322
14 um Count: 6188
21 um Count: 61
25 um Count: 23
35 um Count: 4
70 um Count: 1

Count	235 965	236 234
4 um	52989	3354
8 um	32322	569
14 um	6188	136
21 um	61	25
25 um	23	16
35 um	4	7
70 um	1	1



Comment: Solid particle contamination has improved significantly after filtration

Classification Analysis: ISO-4406 from 1.5 litres
Water Content ppm

Count	235 965	236 234
Water	39	32

