



**FILTER  
TECHNOLOGY**

cleaner fluids mean better business

**CASE STUDY**

**Hydraulics**

Case No : 2 - 6 - 18

## Hydraulics, Hire FM 1640 : Muswellbrook Coal, NSW

### Muswellbrook Coal

Muswellbrook Coal hired a FM 1640 to clean their Caterpillar 5230 Excavator Hydraulic system, the unit was run over a weekend shutdown for two days, samples were taken before and after filtering.

The report attached indicates the oil at ISO 20/17 before filtering and after two days connected to the FM1640 had reduced the particulate contamination to ISO 17/15 a 86% reduction.

The patch test also indicates the reduction in contamination achieved using this unit.



4 Walter Street, PO Box 489  
Singleton NSW 2330  
Phone: (82) 6571-4444  
Facsimile: (82) 6571-4433  
Web: www.oiltest.com.au



This Report No:

200.716

Date:

10-Sep-03

12-Sep-03

Report No:

200.714

200.716

Meter Reading:

35760hrs

35760hrs

Oil Hrs:

-

-

Oil Changed:

No

No

Client:

Muswellbrook Coal Co Ltd

Attention To:

OIL TEST - Coal Road, MUSWELLBROOK

Machine:

105 CAT 5230 Excavator

Sample Location:

Hydraulics

Oil Type:

CALTEX RANDO HD 68 - GREEN

Particle Analysis

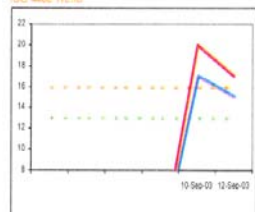
Limit

- > 4 um Count
- > 6 um Count
- > 10 um Count
- > 14 um Count
- > 21 um Count
- > 25 um Count
- > 38 um Count
- > 70 um Count

Particle Size	10-Sep-03	12-Sep-03
> 4 um Count	37688	5005
> 6 um Count	9673	1288
> 10 um Count	2151	495
> 14 um Count	936	289
> 21 um Count	229	122
> 25 um Count	94	54
> 38 um Count	8	4
> 70 um Count	3	2

ISO 4406 Trend

Comment



Sample cleanliness has improved significantly after filtration @ 17/15. Further filtration may be desirable.

Chemical Analysis

Limit

ISO-4406 Sum 14um  
Water Content ppm

ISO-4406 Sum 14um	10-Sep-03	12-Sep-03
ISO-4406 Sum 14um	20/17	17/15
Water Content ppm	+-	+-

