



**FILTER TECHNOLOGY**

cleaner fluids mean better business

**CASE STUDY**

**Industrial**

Case No : 9 - 6 - 5

**Power : Circuit Breaker - City Power**

**City Power**

City Power usually uses a large filter press situated on the back of a truck to clean the transformer oil in Circuit Breakers and Tap Changers, City Power contacted Filter Technology and decide the FM 504 fitted with a 20LPM pump would suit the application as the FM 504 was much smaller and a lot easier to move than the current system, stair-climbing wheels were installed to negotiate the inner city sub stations.

Circuit Breakers can't be off line for long periods so the ease and more accessibility of the FM 504 made good sense to City Power.

The FM 504 achieved in one pass what the old system would have taken five passes to achieve.



The Transformer Oil was 82% cleaner after filtering and the dielectric strength improved by 15%

4 Waller Street | PO Box 499  
 Singleton NSW 2330  
 Phone: (02) 6671-1444  
 Facsimile: (02) 6671-4423  
 Web: www.oiltest.com.au



This Report No: 243,871

Date  
 Report No.  
 Meter Reading  
 Oil Hrs  
 Oil Changed

|  | 15-Jun-05 | 15-Jun-05 | 17-Jun-05 |
|--|-----------|-----------|-----------|
|  | 243,865   | 243,870   | 243,871   |
|  | Chrs      | Chrs      | Chrs      |
|  | -         | -         | -         |
|  | No        | No        | No        |

Client  
 Attention To:  
 Machine:  
 Sample Location:  
 Oil Type:

Filter Technology Australia Pty Ltd  
 RDC MIDDLETON - 71 Racecourse Road, Rutherford  
 BOUV Bouvourie Feeder  
 Hyde 85BQ253  
 ISO 15

Particle Analysis  
 > 4 um Count  
 > 8 um Count  
 > 10 um Count  
 > 14 um Count  
 > 21 um Count  
 > 25 um Count  
 > 38 um Count  
 > 70 um Count

Limit

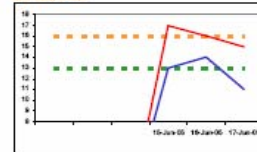
|               | 15-Jun-05 | 15-Jun-05 | 17-Jun-05 |
|---------------|-----------|-----------|-----------|
| > 4 um Count  | 5965      | 1069      | 769       |
| > 8 um Count  | 1215      | 414       | 160       |
| > 10 um Count | 188       | 149       | 43        |
| > 14 um Count | 61        | 113       | 19        |
| > 21 um Count | 23        | 88        | 5         |
| > 25 um Count | 18        | 79        | 3         |
| > 38 um Count | 10        | 55        | -         |
| > 70 um Count | 5         | 19        | -         |

Cleanliness Analysis  
 ISO-4406 6um / 14um  
 Water content ppm

Limit

|                     | 15-Jun-05 | 15-Jun-05 | 17-Jun-05 |
|---------------------|-----------|-----------|-----------|
| ISO-4406 6um / 14um | 17/1/3    | 16/1/4    | 15/1/1    |
| Water content ppm   | 31        | 19        | 24        |

ISO 4406 Trend



Comment

After filtration, solid particle contamination has improved.

