



**FILTER
TECHNOLOGY**

cleaner fluids mean better business

CASE STUDY

Quarrying

Case No : 7 - 6 - 6

Oil Filtration, Kawasaki Cone Crusher : Concrete Recyclers

Concrete Recyclers - Kawasaki 1350 Cone Crusher

In February 2001 Concrete Recyclers fitted a JQ340 lube system to their Kawasaki 1350 Cone Crusher in order to overcome silicon ingress and higher than normal operating temperatures due to increased viscosity (see sample 25387).

Oil drains have been increased from 600 hours to 3000 hours servicing has been done on a three monthly basis, due to the success of this crusher system all the crushers operated by CR have now been fitted with FTAs units, they have now installed FTAs bypassed engine oil filters onto their loaders and excavators increasing their oil drains from 250 hours to 500 hours.



Lubetech Pty Ltd

Oil Analysis Report

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Client	Filter Technology Australia Pty Ltd / New South Wales		Site	Granville
Contact	Phillip Marheine		Unit ID/Name	QAO162EG / Concrete recyclers
Address			Manufacture/Model	Kawasaki Crusher / 1350
Telephone	02 4932 9998		Origin	Sump
Fax	02 4932 9997		Fuel/Oil Type	Machine Oil 150

Diagnosis:

Oil and wear condition appear satisfactory. Visible particles in the oil bottle which are affecting the Particle Count reading. Particles do not appear to be metallic in nature. Continue to monitor.



	34410	33067	30836	29135	26877	26258	25387	Indicative Levels
Date	03/06/2002	01/04/2002	03/12/2001	28/08/2001	16/05/2001	10/04/2001	22/02/2001	
Total Hours/Km			2450			1200		
Oil Changed	NO	NO	NO	NO	NO	NO	NO	
Oil Added								
Fuel Dilution (%)								
WT Solids (%)								
Volume Water (%)	ND	ND	ND	ND	ND	ND	ND	0.1
Water PPM								
Viscosity @ 40C (cST)	142	152	148	157	159	162	170	>10%
TAN (mg/KOH/g)	0.28	0.30	0.21	0.13	0.20	0.20	0.10	
TBN (mg/KOH/g)								
ApH		+1	+4		+3	+0	+3	
PO90 Index								
Aluminum (Al)	2	<1	<1	<1	<1	<1	<1	15
Silicon (Si)	7	7	12	9	7	10	16	40
Tin (Sn)	<1	<1	5	<1	8	5	6	20
Iron (Fe)	8	3	5	5	3	4	3	180
Lead (Pb)	19	23	20	18	18	27	16	20
Copper (Cu)	74	59	70	64	60	25	59	180
Chromium (Cr)	<1	<1	3	2	1	<1	<1	10
Sodium (Na)	<1	<1	5	5	<1	3	<1	80
Zinc (Zn)	16							
Others								
ISO4406	22/18	21/18	>24/21					19/16
Gravi-Metric								
>2 micron	75423	48973						
>5 micron	24568	18102						
>15 micron	1801	1932						
Contamination	High	Elevated						
Total Count								350
Severity Index								95
Size Ratio								4
% Large Particles								70
DR Ferrograph								
Wear Types								
Rubbing								
Fatigue								
Laminar								
Sliding								
Cutting								
Dark/Red Oxide								
Non-Ferrous								
Dirt/Sludge								

