LubeCheck ™ - Oil Analysis for Predictive Maintenance

Customer Code : **8888**

Customer Name : **ABC Manufacturing Co.,Ltd**

Address : 123 Sukhumvit Road , Map Ta Phut Rayong 21150

Test code : 884

Lube System Capacity : 200 Liters

Unit ID Number : **Duplex 2 Gear Reducer**

Unit Type : Gearbox

Unit Make : Flender

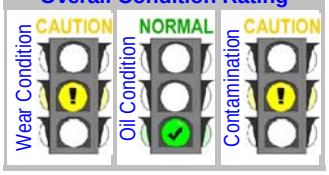
Unit Model : B 3 FH 13

Oil type / Viscosity : CALTEX MEROPA 320

Site Name :

Location :

Overall Condition Rating

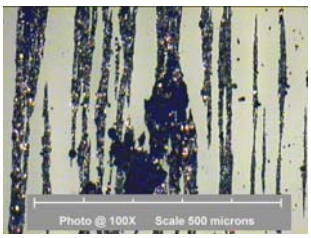


	Current Sample	Previous Sample	
FocusLab ID	67777	66446	65784
Date sampled	14-Dec-06	14-Nov-06	31-Oct-06
Hours on Oil	170	480	400
Hours on Unit	28490	28320	27840
Bottle ID	858971	858720	854321
Volume of Sample Used	3 ml	3 ml	3 ml

Ferrographic Analysis

Typical Normal Ferrogram

Image of Wear & Contaminants Magnification 40X



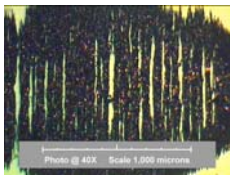
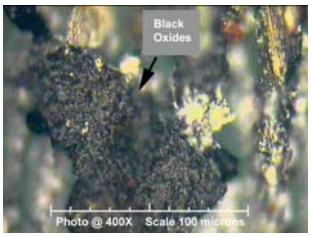
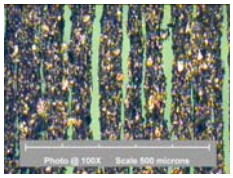


Image of Wear & Contaminants Magnification 100X





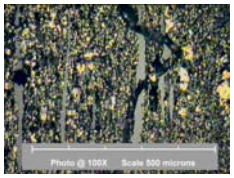
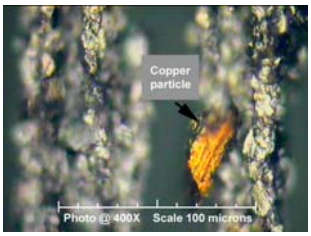
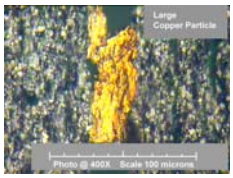
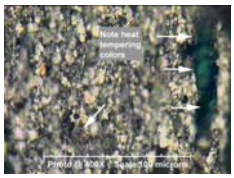


Image of Wear & Contaminants Magnification 400X







Wear & Contaminants Particles	%Rating	Size (Micron)	Particle Type	%Rating	Size (Micron)	Particle Type	%Rating	Size (Micron)	Particle Type	%Rating	Size (Micron)	Particle Type
Normal Rubbing Wear	3	2-3	F	5	3-5	F	2	10-20	F			
Fatique Wear	4	20-50	F	4	10-50	F	7	20-80	F			
Fatique Sphere												
Sliding Wear												
Cutting Wear												
Black Oxides	2	20-100	F				1	20-30	F			
Red Oxides												
Corrosive Wear												
Dirt and Dust												
Copper	1	20-50	N	1	120	N						

Recommendations and Notes

Black oxides in ferrogram can indicate insufficient lubrication. Possible reasons/sources; improper oil type, improper grade of oil, poor lubricant film strength, poor lubricant circulation, blocked oil passages, equipment overloading or overheating.

Copper (bronze or brass) fatigue particles are present.

%Rating : Percent area covered by wear debris particles or contaminant particles
Size : Size in micron (0.001 mm) unit of wear debris particles or contaminant particles
F: Ferrous Wear Particle, **N**: Non-ferrous Wear Particle, **C** Contaminant Particle

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