A Normal B Caution C Serious X Critical

X

Customer Name	Example Customer	Serial Number	3285441
Address	Unit 22-24,Business Park	Unit No. / Model	Wind Turbine
	Big City,	Type	Sampled system: Grease/Bearing
	AB12 3AS	JS Sys	Job 10 Grease (Bearing)
Sample Date	23/01/2019	Job No	
Received Date	24/01/2019	Brand	Kluber Kluberplex BEM 41 141 1 (NLGI)

Diagnosis: Grease shows considerable wear including iron, ferrous debris, Manganese and Chromium usually derived from the bearing elements and gear shafts as well as copper from yellow metal bearings and cage material. The higher LubeWear values compared to ASTMD5185 wear elements shows a skew towards larger wear particles Indicating an abnormal wear mechanism is occurring. **Advice** At next practical opportunity, re-grease bearing. It would also be useful to inspect system for any abnormal noise, heat or vibration & feedback findings to the lab before the next sample to investigate further. Also consider reviewing any recent service interventions including any alignment changes, changes in operation or changes to loading that cause an increase in wear and feed back these findings to the lab as well.

Sample Details	Test Method	Units	Current Result	Previous #1	Previous #2
Lab No	-	-	OAL1905397		
Sample Date	-	-	23/01/2019		
Meter Hrs	-	-	0		
Fluid Hrs	-	-	0		
Fluid Added	-	-	0.00		
Fluid Changed	-	-	No		
Filter Changed	-	-	No		
Brand	-	-	Kluber Kluber		
Contaminants					
Appearance Solids	OAL Method	Visual	Metal Particles		
Lithium (Li)	ASTMD5185	mg/kg	1818		
Potassium (K)	ASTMD5185	mg/kg	5		
Silicon (Si)	ASTMD5185	mg/kg	84		
Sodium (Na)	ASTMD5185	mg/kg	25		
Titanium (Ti)	ASTMD5185	mg/kg	2		
Vanadium (V)	ASTMD5185	mg/kg	7		
Vanadium (V)	LubeWear	mg/kg	2		
Water (free)	Crackle & CaH2	%	<0.1		
Wear Metals					
Aluminium	ASTMD5185	mg/kg	59		
Aluminium (Al)	LubeWear	mg/kg	68		
Chromium (Cr)	ASTMD5185	mg/kg	412		
Chromium (Cr)	LubeWear	mg/kg	418		
Copper (Cu)	ASTMD5185	mg/kg	324		
Copper (Cu)	LubeWear	mg/kg	762		
Ferrous Debris	ASTMD8120	mg/kg	>10000		
Iron (Fe)	ASTMD5185	mg/kg	7489		
Iron (Fe)	LubeWear	mg/kg	21416		
Lead (Pb)	ASTMD5185	mg/kg	18		
Lead (Pb)	LubeWear	mg/kg	24		
Manganese (Mn)	ASTMD5185	mg/kg	227		
Manganese (Mn)	LubeWear	mg/kg	234		
Nickel (Ni)	ASTMD5185	mg/kg	221		
Nickel (Ni)	LubeWear	mg/kg	235		
Silver (Ag)	ASTMD5185	mg/kg	0		
Silver (Ag)	LubeWear	mg/kg	0		
Tin (Sn)	ASTMD5185	mg/kg	3		
Tin (Sn)	LubeWear	mg/kg	3		

Lab Address: Unit 5 Creamery Trade Park, Station Road, Mochdre, Colwyn Bay, LL28 5EF

Interpreted By Adam

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Additives					
Boron (B)	ASTMD5185	mg/kg	178		
Calcium (Ca)	ASTMD5185	mg/kg	78		
Magnesium (Mg)	ASTMD5185	mg/kg	3		
Molybdenum (Mo)	ASTMD5185	mg/kg	3066		
Phosphorus (P)	ASTMD5185	mg/kg	877		
Zinc (Zn)	ASTMD5185	mg/kg	270		