



Normal



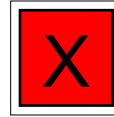
Caution



Serious



Critical

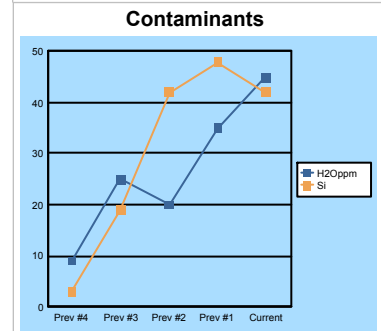
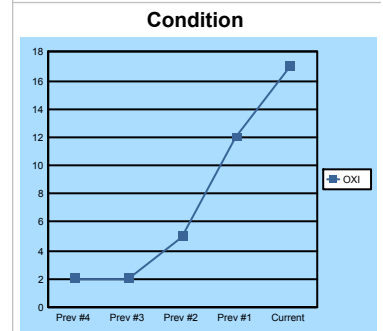
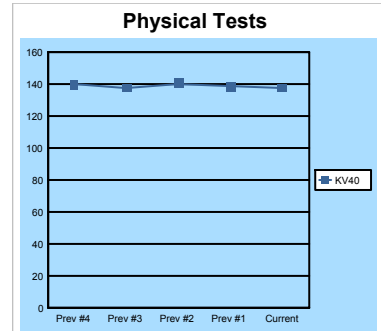


Example Customer
 Address Unit 22-24, Business Park
 Big City,
 AB12 3AS
 Sample Date 05/07/2018
 Received Date 06/07/2018

Serial Number Example Gear
 Unit No. / Model Example GB
 Type FoodMek :-
 JS Sys London Branch #JS11 Gearbox (Lube)
 Job No Bottle Label
 Brand Other 150 (ISO VG)

Diagnosis: Silicon & Aluminium suggest Aluminium Silicate (Dirt) Ingress. Chromium suggests wear to chrome plated parts, e.g. bearing / shaft materials. Copper may be wear to brass / bronze materials and bushings, or wear / corrosion of bearing cages. LubeWear metal is significantly higher than ICP wear, suggesting wear particles are large, consistent with an abnormal wear process. **Advice:** At next practical opportunity flush & change oil if not done when sampled. Resample after refill to establish new baseline. Identify sources of contamination ingress such as lubricant storage, machinery operating environment, labelling and top-up and transfer containers.

Sample Details	Test Basis	Units	Current Result	Previous #1	Previous #2
Lab No	-	-	<u>OAL1904500</u>	<u>OAL1904400</u>	<u>OAL1904300</u>
Sample Date	-	-	05/07/2018	07/06/2018	04/05/2018
Meter Hrs	-	-	4009	2936	2491
Fluid Hrs	-	-	1998	1503	925
Fluid Added	-	-	0.00	0.00	0.00
Fluid Changed	-	-	No	No	No
Filter Changed	-	-	No	No	No
Brand	-	-	Other	Other	Other
Physical Tests					
<u>Viscosity @ 40°C</u>	ASTMD7279	mm2/s	138	139	141
Condition					
Oxidation	JOAP	A/cm	17	12	5
Contaminants					
Appearance Fluid	OAL Method	Visual	Bright	Bright	Bright
Appearance Solids	OAL Method	Visual	Metal Particles	Metal Particles	Metal Particles
<u>Lithium (Li)</u>	ASTMD5185	mg/kg	0	0	1
<u>Potassium (K)</u>	ASTMD5185	mg/kg	1	0	0
<u>Silicon (Si)</u>	ASTMD5185	mg/kg	42	48	42
<u>Sodium (Na)</u>	ASTMD5185	mg/kg	9	3	0
<u>Titanium (Ti)</u>	ASTMD5185	mg/kg	0	1	0
<u>Titanium (Ti)</u>	LubeWear	mg/kg	1	1	0
<u>Vanadium (V)</u>	ASTMD5185	mg/kg	1	0	0
<u>Vanadium (V)</u>	LubeWear	mg/kg	1	0	0
<u>Water (dissolved)</u>	ASTMD6304	mg/kg	45	35	20
<u>Water (free)</u>	Crackle & CaH2	%	0.0	0.0	0.0
Wear Metals					
<u>Aluminium</u>	ASTMD5185	mg/kg	27	22	17
<u>Aluminium (Al)</u>	LubeWear	mg/kg	28	25	16
<u>Cadmium (Cd)</u>	ASTMD5185	mg/kg	0	1	1
<u>Cadmium (Cd)</u>	LubeWear	mg/kg	5	4	4



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

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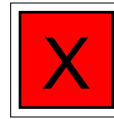
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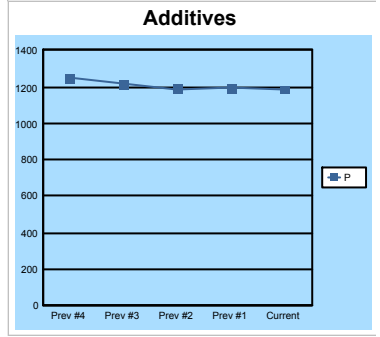
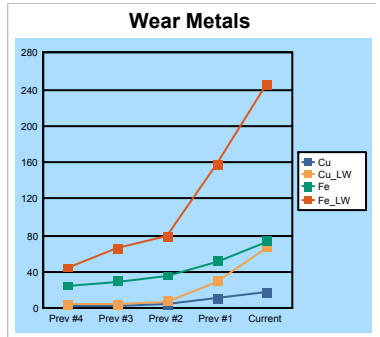


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Wear Metals					
Chromium (Cr)	ASTMD5185	mg/kg	6	5	4
Chromium (Cr)	LubeWear	mg/kg	21	14	13
Copper (Cu)	ASTMD5185	mg/kg	17	10	4
Copper (Cu)	LubeWear	mg/kg	66	29	7
Ferrous Debris	ASTMD8120	mg/kg	54	37	29
Iron (Fe)	ASTMD5185	mg/kg	73	51	35
Iron (Fe)	LubeWear	mg/kg	245	157	78
Lead (Pb)	ASTMD5185	mg/kg	3	3	2
Lead (Pb)	LubeWear	mg/kg	2	2	2
Manganese (Mn)	ASTMD5185	mg/kg	2	1	1
Manganese (Mn)	LubeWear	mg/kg	10	8	4
Nickel (Ni)	ASTMD5185	mg/kg	1	0	0
Nickel (Ni)	LubeWear	mg/kg	0	0	0
Silver (Ag)	ASTMD5185	mg/kg	0	0	0
Silver (Ag)	LubeWear	mg/kg	0	0	0
Tin (Sn)	ASTMD5185	mg/kg	2	2	1
Tin (Sn)	LubeWear	mg/kg	2	1	1



Additives					
Barium (Ba)	ASTMD5185	mg/kg	0	0	0
Boron (B)	ASTMD5185	mg/kg	3	2	2
Calcium (Ca)	ASTMD5185/D7751	mg/kg	9	8	9
Magnesium (Mg)	ASTMD5185/D7751	mg/kg	2	1	1
Molybdenum (Mo)	ASTMD5185/D7751	mg/kg	0	1	0
Phosphorus (P)	ASTMD5185/D7751	mg/kg	1186	1192	1189
Zinc (Zn)	ASTMD5185/D7751	mg/kg	48	52	58



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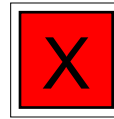
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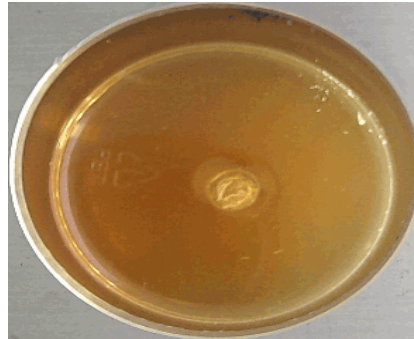
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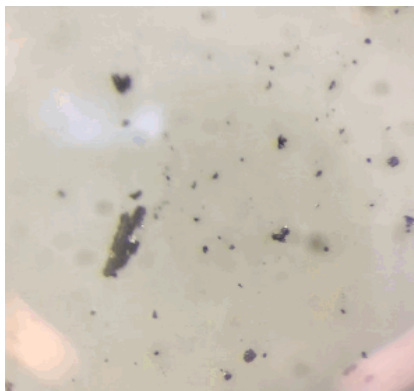
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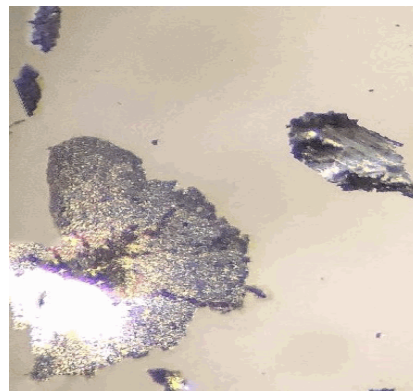
Sample as received side view



Sample as received underneath view showing metal particles



Microscopic analysis showing dirt particles and fatigue wear.



Microscope image showing fatigue wear and ferrous material.

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