



LIEBHERR

OIL ANALYSIS REPORT



Area
[610306]
 Machine Id
076507-1204
 Component
Unknown Component
 Fluid
{not provided} (--- GAL)

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Please provide more complete information on your next sample.

WEAR

All component wear rates are normal.

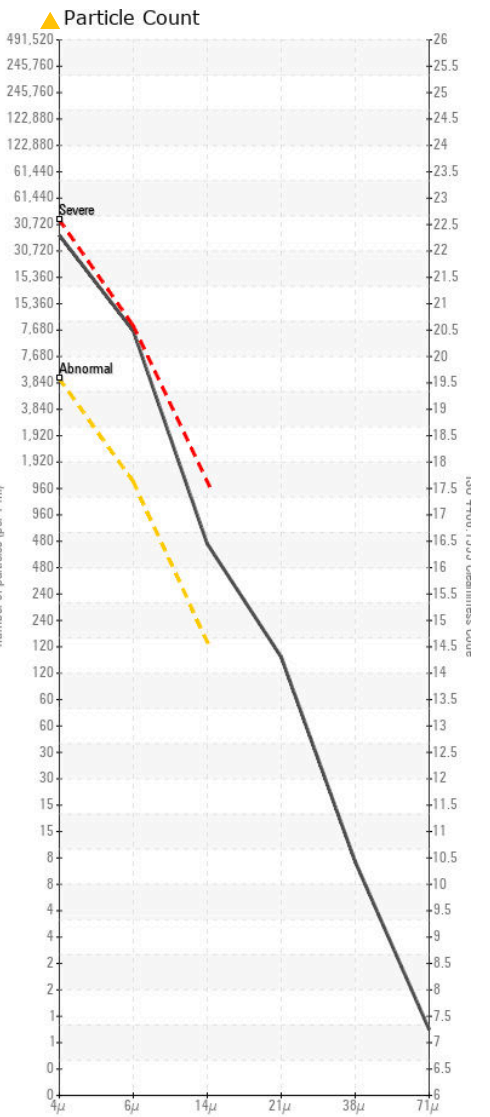
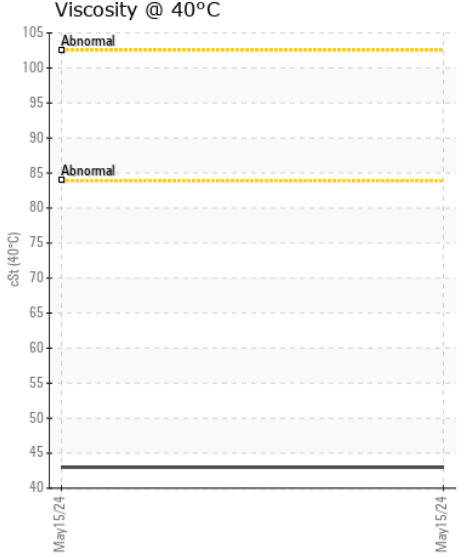
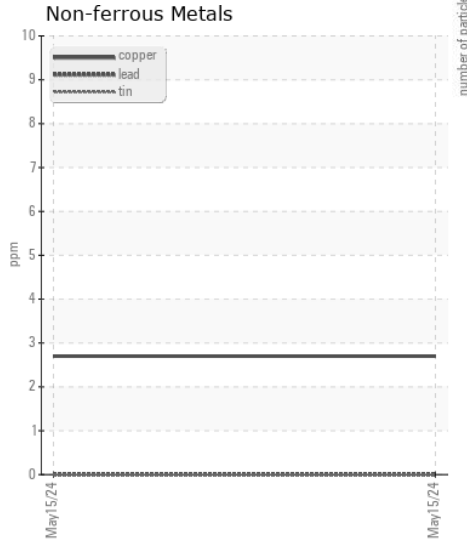
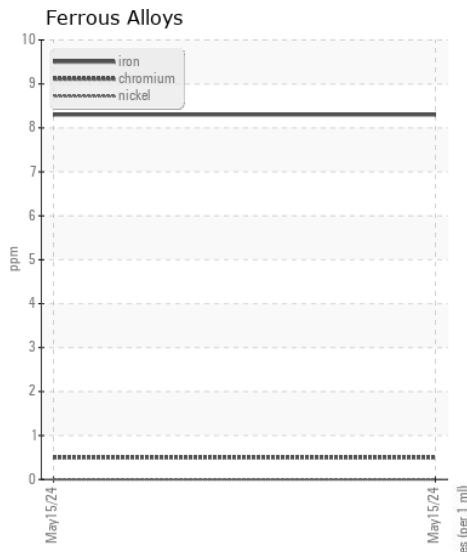
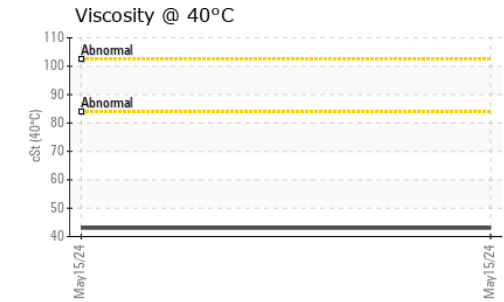
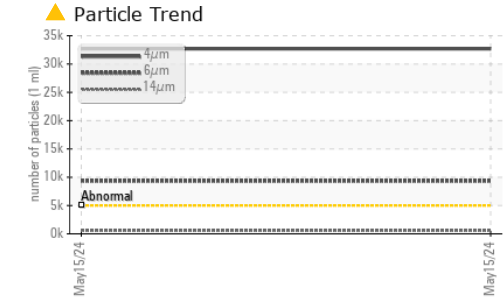
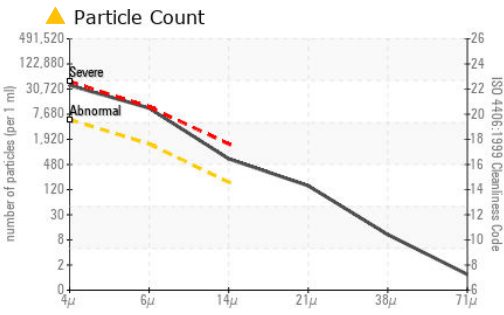
CONTAMINATION

There is a moderate amount of particulates (2 to 100 microns in size) present in the sample.

FLUID CONDITION

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The sample is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0276244	---	---
Sample Date		Client Info		15 May 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185(m)		8	---	---
Chromium	ppm	ASTM D5185(m)		<1	---	---
Nickel	ppm	ASTM D5185(m)		0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)		<1	---	---
Lead	ppm	ASTM D5185(m)		0	---	---
Copper	ppm	ASTM D5185(m)		3	---	---
Tin	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)		<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method		NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 32685	---	---
Particles >6µm		ASTM D7647	>1300	▲ 9354	---	---
Particles >14µm		ASTM D7647	>160	▲ 576	---	---
Particles >21µm		ASTM D7647	>40	▲ 131	---	---
Particles >38µm		ASTM D7647	>10	9	---	---
Particles >71µm		ASTM D7647	>3	1	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/16	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	LIGHT	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*		NEG	---	---
Sodium	ppm	ASTM D5185(m)		2	---	---
Boron	ppm	ASTM D5185(m)		10	---	---
Barium	ppm	ASTM D5185(m)		<1	---	---
Molybdenum	ppm	ASTM D5185(m)		4	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		30	---	---
Calcium	ppm	ASTM D5185(m)		386	---	---
Phosphorus	ppm	ASTM D5185(m)		432	---	---
Zinc	ppm	ASTM D5185(m)		529	---	---
Sulfur	ppm	ASTM D5185(m)		1161	---	---
Visc @ 40°C	cSt	ASTM D7279(m)		43.0	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0276244 **Received** : 21 May 2024
Lab Number : 02636707 **Tested** : 23 May 2024
Unique Number : 5785869 **Diagnosed** : 23 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PRTCOUNT)

American Iron and Metal
 75 Steel City Court
 Hamilton, ON
 CA L8H 3Y2
 Contact: Heavy Equipment
 hamiltonmobileassetmaintenance@aim-recycling.com
 T: (905)547-5533
 F: (905)544-5671

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.