WEAR CONTAMINATION FLUID CONDITION

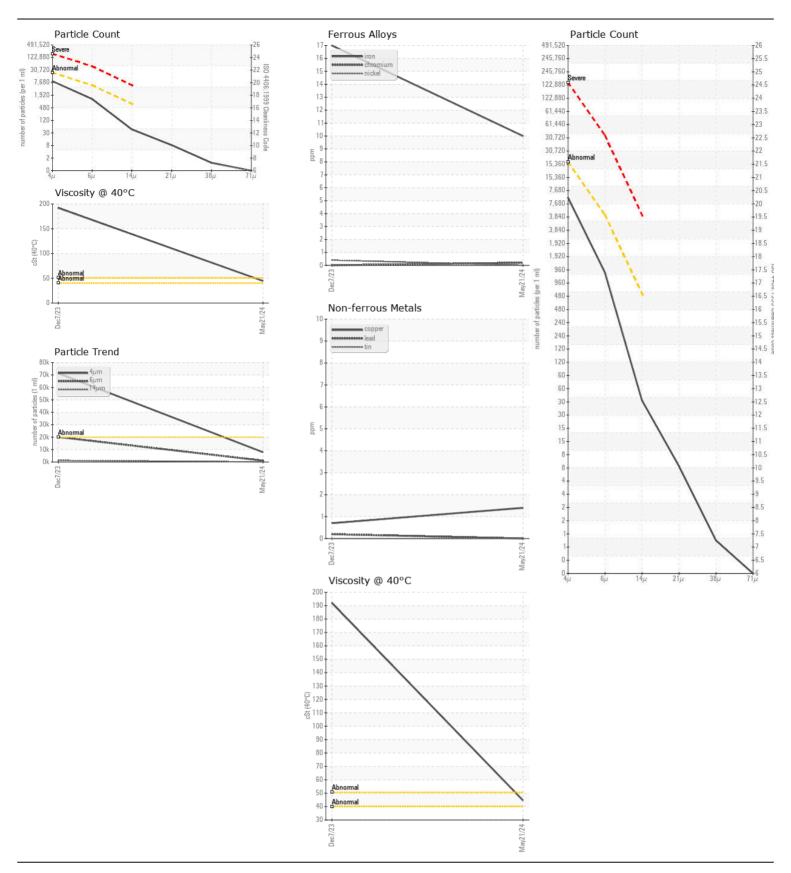
NORMAL NORMAL NORMAL



Machine Id LIEBHERR 151293-1216

Component Hydraulic System

{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		LH0290908		
	Sample Date		Client Info		21 May 2024	07 Dec 2023	
	Machine Age	hrs	Client Info		1496	616	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Not Changd	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>50	10	17	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>5	<1	0	
	Nickel	ppm	ASTM D5185(m)	>2	0	<1	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)		0	<1	
	Aluminum	ppm	ASTM D5185(m)		<1	<1	
	Lead	ppm	ASTM D5185(m)		0	<1	
	Copper	ppm	ASTM D5185(m)		1	<1	
	Tin	ppm	ASTM D5185(m)	>2	0	0	
	Vanadium	ppm	ASTM D5185(m)	NONE	0	0	
	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
CONTAMINATION Silicon ppm ASTM D5185(m)					1	<1	
SSITAMINATION	Potassium	ppm	ASTM D5185(m)		<1	3	
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.	Water	PP	WC Method	>0.1	NEG	NEG	
	Particles >4µm		ASTM D7647	>20000	7873	<u></u> 471430	
	Particles >6µm		ASTM D7647	>5000	1102	<u>^</u> 20065	
	Particles >14µm		ASTM D7647	>640	39	1251	
	Particles >21µm		ASTM D7647	>160	7	269	
	Particles >38μm		ASTM D7647	>40	1	13	
	Particles >71μm		ASTM D7647	>10	0	1	
	Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/17/12	<u>\$\Delta\$ 23/22/17</u>	
	Silt	scalar	Visual*	NONE	NONE	NONE	
	Debris		Visual*	NONE	VLITE	VLITE	
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
	Appearance		Visual*	NORML	NORML	NORML	
	Odor		Visual*	NORML	NORML	NORML	
	Emulsified Water	scalar	Visual [^]	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		<1	5	
TEOID CONDITION	Boron	ppm	ASTM D5185(m)		<1	1	
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0	<1	
	Molybdenum	ppm	ASTM D5185(m)		0	0	
	Manganese	ppm	ASTM D5185(m)		0	1	
	Magnesium	ppm	ASTM D5185(m)		6	1	
	Calcium	ppm	ASTM D5185(m)		967	14	
	Phosphorus	ppm	ASTM D5185(m)		634	1568	
	Zinc	ppm	ASTM D5185(m)		751	15	
	Sulfur	ppm	ASTM D5185(m)		2829	24820	
	Visc @ 40°C	cSt	ASTM D7279(m)		44.6	192	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : LH0290908 Lab Number : 02636962

Unique Number : 5786124

Received **Tested** Diagnosed : 22 May 2024

: 23 May 2024

: 23 May 2024 - Wes Davis

Test Package : MOB 1 (Additional Tests: PrtCount) 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.

1625066 ONTARIO LTD. 870 MACKAY RD PICKERING, ON

CA L1W 2Y4 Contact: Service Manager

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