WEAR CONTAMINATION FLUID CONDITION

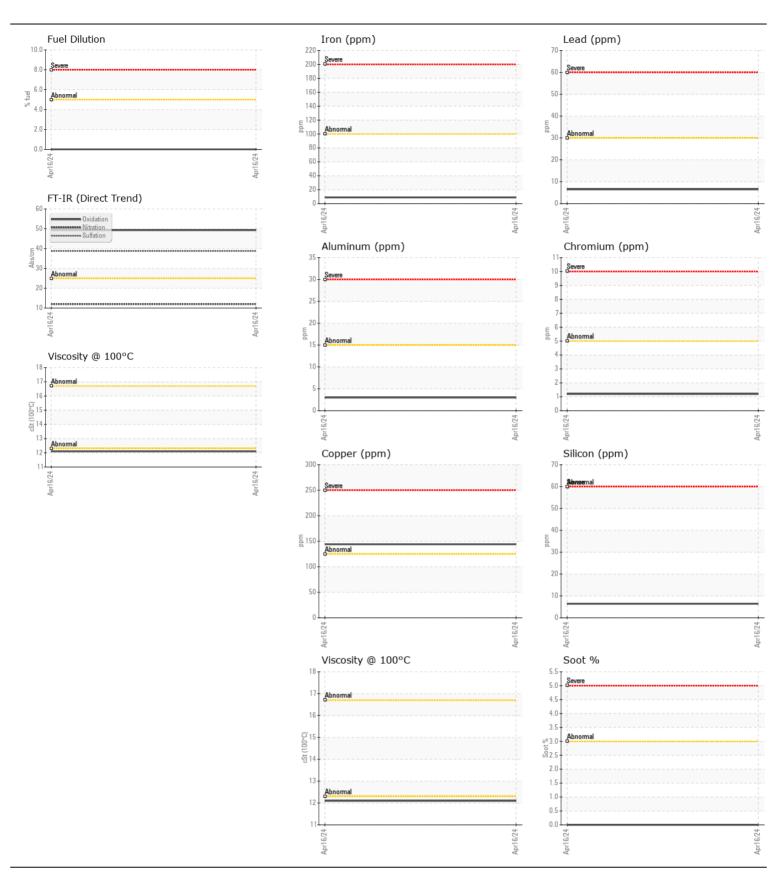
NORMAL NORMAL NORMAL



Machine Id LIEBHERR LH50M 155396-1216

Diesel Engine

Diesel Engine {not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number	COM	Client Info	Limitorion	LH0283379		
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		16 Apr 2024		
	Machine Age	hrs	Client Info		500		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>100	9		
	Chromium	ppm	ASTM D5185(m)	>5	1		
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185(m)	>5	0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>15	3		
	Lead	ppm	ASTM D5185(m)	>30	6		
	Copper	ppm	ASTM D5185(m)	>125	144		
	Tin	ppm	ASTM D5185(m)	>5	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>60	6		
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	2		
	Fuel	%	ASTM D7593*	>5	0.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0		
	Nitration	Abs/cm	ASTM D7624*	>20	12.0		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	38.7		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
	Boron	ppm	ASTM D5185(m)		91		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		36		
	Molybdenum	ppm	ASTM D5185(m)		47		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		914		
	Calcium	ppm	ASTM D5185(m)		1273		
	Phosphorus	ppm	ASTM D5185(m)		699		
	Zinc	ppm	ASTM D5185(m)		835		
	Sulfur	ppm	ASTM D5185(m)		2094		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	49.3		
	Visc @ 100°C	cSt	ASTM D7279(m)		12.1		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: LH0283379 Lab Number : 02639563 Unique Number : 5788725

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 04 Jun 2024 **Tested**

: 06 Jun 2024 Diagnosed : 06 Jun 2024 - Kevin Marson

Test Package : MOBCE (Additional Tests: FuelDilution, PercentFuel, Visual)

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.

J.M. BASTILLE ACIER INC

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Contact: MANAGER SERVICE

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