WEAR CONTAMINATION FLUID CONDITION

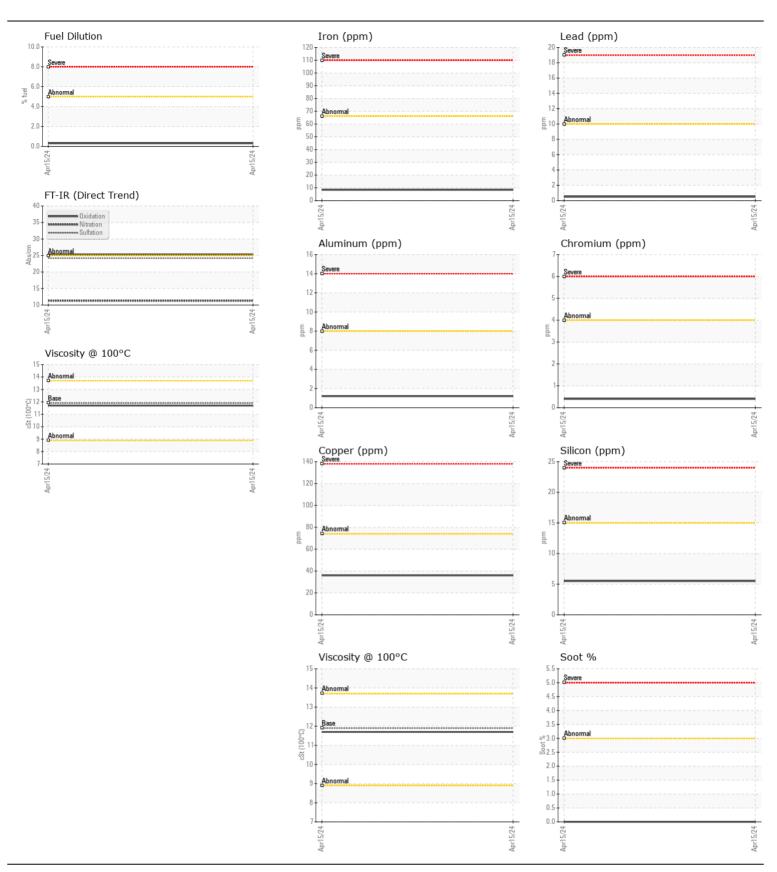
NORMAL NORMAL



Machine Id LIEBHERR LH50M 146771-1216

Component
Diesel Engine

PETRO CANADA DURON UHP	5W30 (G	AL)					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		LH0287049		
	Sample Date		Client Info		15 Apr 2024		
	Machine Age	hrs	Client Info		1892		
	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)	>66	8		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		<1		
	Nickel	ppm	ASTM D5185(m)	>4	0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>8	1		
	Lead	ppm	ASTM D5185(m)		<1		
	Copper	ppm	ASTM D5185(m)	>74	36		
	Tin	ppm	ASTM D5185(m)	>4	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	0.11		40TM DE40E()	45			
CONTAMINATION	Silicon	ppm	ASTM D5185(m)		6		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel	%	ASTM D7593*	>5	0.3		
	Water		WC Method	>0.2	NEG		
	Glycol	0/	WC Method	. 0	NEG 0		
	Soot % Nitration	% Abs/cm	ASTM D7844* ASTM D7624*	>3 >20	11.3		
	Sulfation	Abs/.1mm	ASTM D7624 ASTM D7415*	>30	24.2		
	Emulsified Water		Visual*	>0.2	NEG		
				~0.L			
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		5		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		39		
	Barium	ppm	ASTM D5185(m)		4		
	Molybdenum	ppm	ASTM D5185(m)		60		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	, ,	1160	1121		
	Calcium	ppm	ASTM D5185(m)	820	927		
	Phosphorus	ppm	ASTM D5185(m)		928		
	Zinc	ppm	ASTM D5185(m)	1260	1170		
	Sulfur	ppm Aba/dama	ASTM D5185(m)	3000	2650		
	Oxidation	Abs/.1mm	ASTM D7414*		25.2		
	Visc @ 100°C	cSt	ASTM D7279(m)	11.9	11.7		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02633404

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Recyclage de Metaux Integre Inc. - RMI Inc. : LH0287049

Received **Tested** Unique Number : 5774557 Diagnosed

: 07 May 2024 Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel)

: 06 May 2024

: 07 May 2024 - Kevin Marson

Fermont, QC CA G0G 1J0 Contact: Paul Germain pgermain@rmi-imr.com T:

1000 Route 389

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.

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