



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH60M 112212-1217
Component
Diesel Engine
Fluid
PETRO CANADA 10W40 (--- GAL)

RECOMMENDATION

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0279404	LH0260983	LH0261059
Sample Date		Client Info		13 Jan 2024	05 Nov 2023	15 Sep 2023
Machine Age	hrs	Client Info		11086	10681	10374
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Les taux d'usure de tous les composants sont normaux.

Iron	ppm	ASTM D5185(m)	>100	4	4	3
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	3	2	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	1
Copper	ppm	ASTM D5185(m)	>125	<1	1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

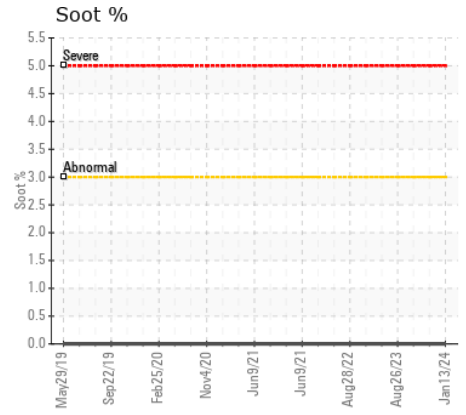
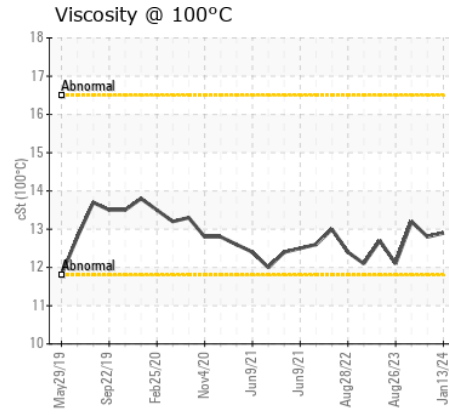
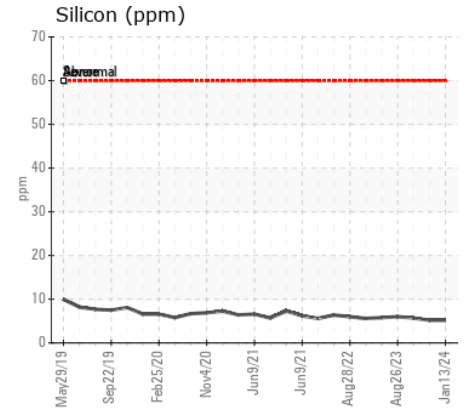
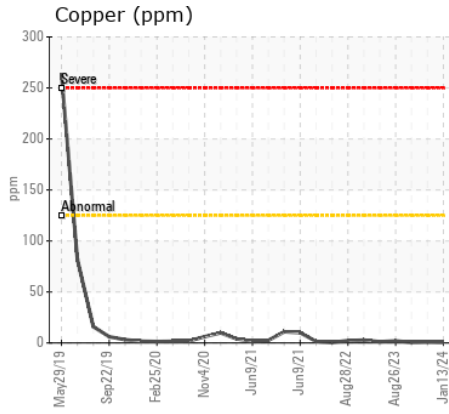
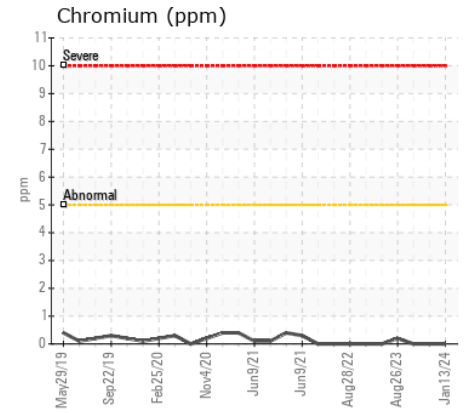
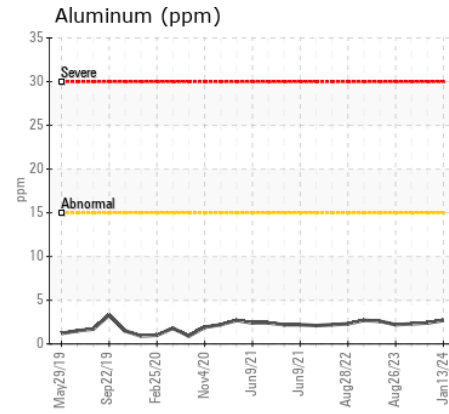
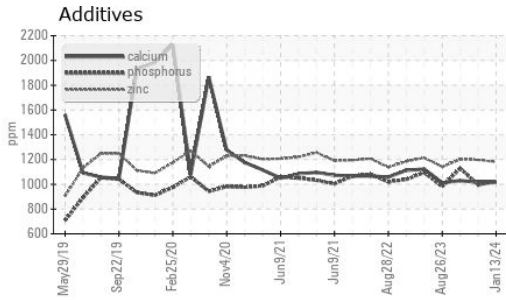
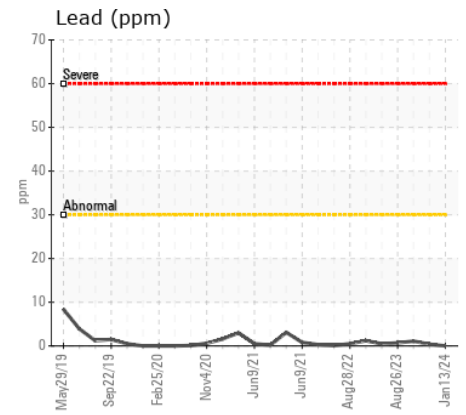
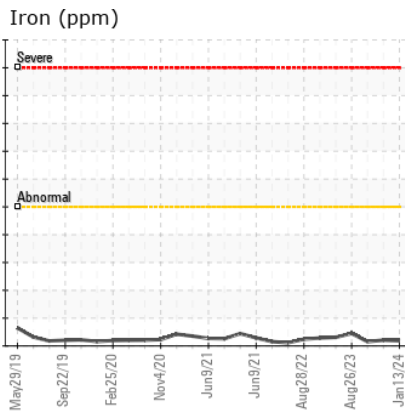
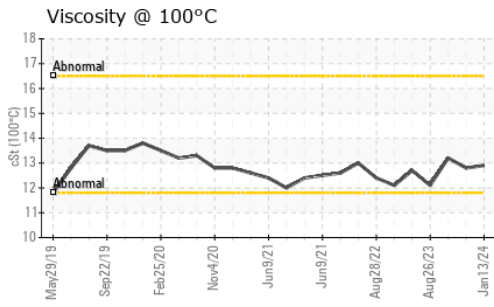
Il n'y a aucun indice de contamination dans l'huile.

Silicon	ppm	ASTM D5185(m)	>60	5	5	6
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.9	10.8	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	39.0	39.1	37.5
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

L'état de l'huile est acceptable pour la durée de service.

Sodium	ppm	ASTM D5185(m)	>20	<1	1	<1
Boron	ppm	ASTM D5185(m)		73	62	110
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		46	46	47
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		878	864	912
Calcium	ppm	ASTM D5185(m)		1018	1016	1030
Phosphorus	ppm	ASTM D5185(m)		1023	996	1130
Zinc	ppm	ASTM D5185(m)		1180	1197	1201
Sulfur	ppm	ASTM D5185(m)		2729	2532	2751
Oxidation	Abs/.1mm	ASTM D7414*	>25	46.3	46.3	43.4
Visc @ 100°C	cSt	ASTM D7279(m)		12.9	12.8	13.2



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ARCELORMITTAL LONG PRODUITS CANADA
Sample No. : LH0279404 **Received** : 17 Jan 2024
Lab Number : 02609229 **Diagnosed** : 17 Jan 2024
Unique Number : 5710315 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: 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.

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