



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH60M 112212-1217

Component
Front Left Wheel Hub

Fluid
CHEVRON DELO SYNTHETIC GEAR 75W90 (9 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
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		LH0279410	LH0279440	LH0269834
Sample Date		Client Info		13 Jan 2024	05 Nov 2023	26 Aug 2023
Machine Age	hrs	Client Info		11086	10681	10300
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
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)	>650	50	32	112
Chromium	ppm	ASTM D5185(m)	>4	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)	>4	0	0	2
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	4	2	9
Lead	ppm	ASTM D5185(m)	>4	0	0	<1
Copper	ppm	ASTM D5185(m)	>60	8	7	17
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	LIGHT

CONTAMINATION

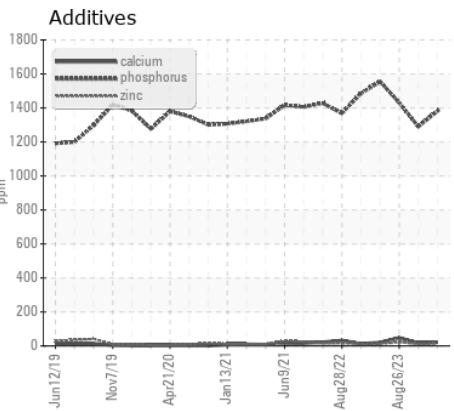
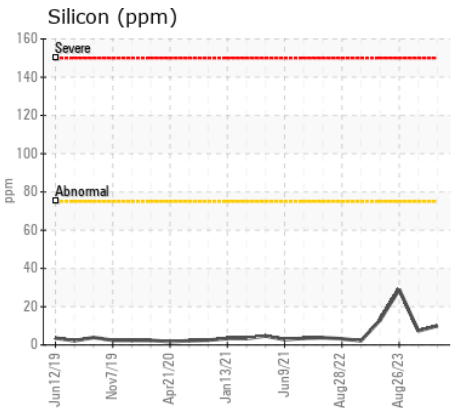
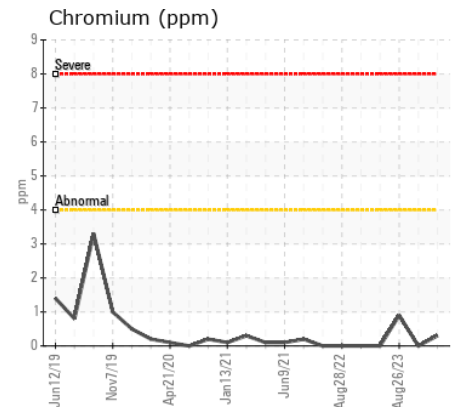
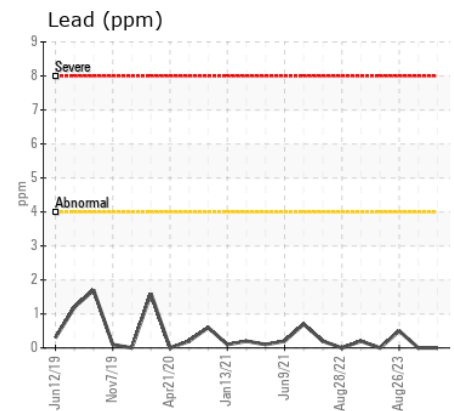
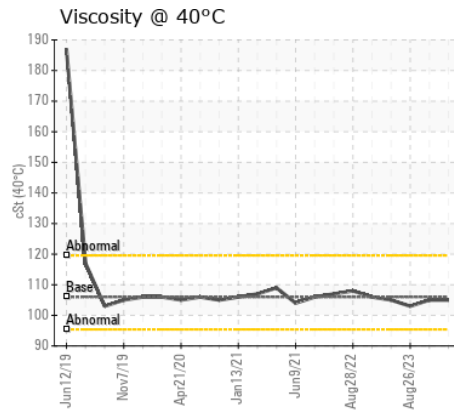
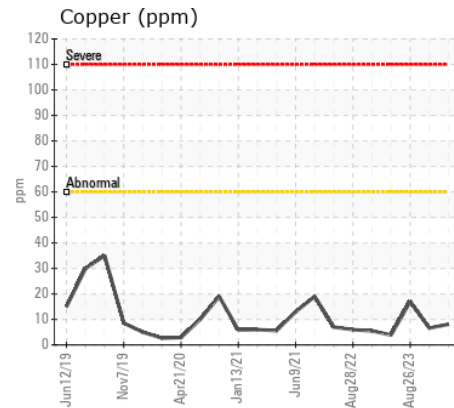
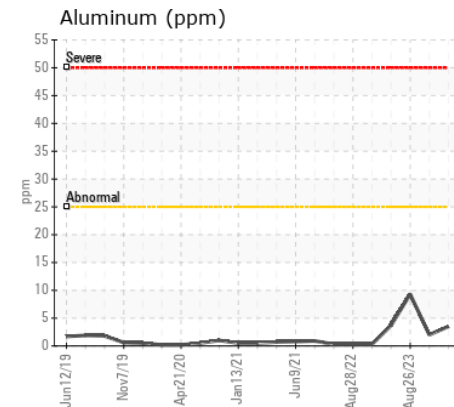
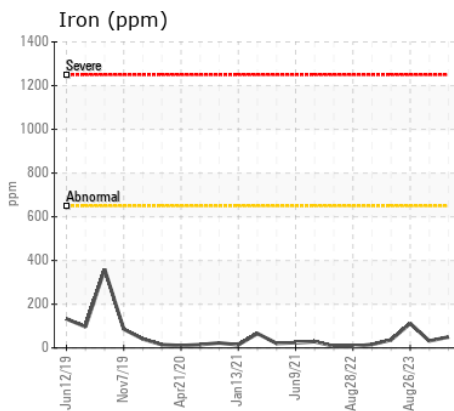
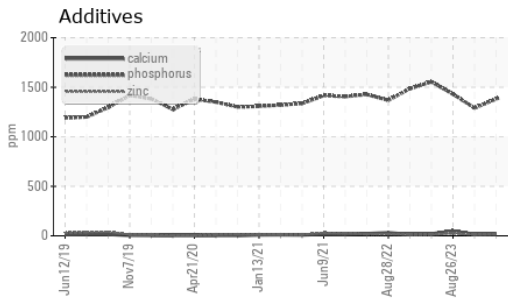
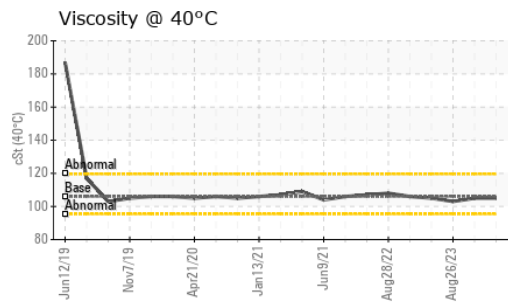
Il n'y a aucun indice de contamination dans l'huile.

Silicon	ppm	ASTM D5185(m)	>75	10	7	29
Potassium	ppm	ASTM D5185(m)	>20	1	<1	1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	VLITE
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

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. L'état de l'huile est acceptable pour la durée de service.

Sodium	ppm	ASTM D5185(m)		<1	1	2
Boron	ppm	ASTM D5185(m)		265	276	277
Barium	ppm	ASTM D5185(m)		0	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	3
Magnesium	ppm	ASTM D5185(m)		4	2	7
Calcium	ppm	ASTM D5185(m)		22	16	48
Phosphorus	ppm	ASTM D5185(m)		1382	1290	1431
Zinc	ppm	ASTM D5185(m)		13	11	22
Sulfur	ppm	ASTM D5185(m)		22622	22280	22222
Visc @ 40°C	cSt	ASTM D7279(m)	106	105	105	103



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ARCELORMITTAL LONG PRODUITS CANADA
Sample No. : LH0279410 **Received** : 17 Jan 2024 3185 ROUTE MARIE-VICTORIN
Lab Number : 02609459 **Diagnosed** : 18 Jan 2024 CONTRECOEUR, QC
Unique Number : 5710545 **Diagnostician** : Kevin Marson CA J0L 1C0
Test Package : MOB 1

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