



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
OR1855
Component
Hydraulic System
Fluid
LIEBHERR HYDRAULIC HVI (--- 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		LH	LH0279573	LH0261140
Sample Date		Client Info		25 Mar 2024	20 Nov 2023	12 Jul 2023
Machine Age	hrs	Client Info		2878	2466	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	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)	>60	22	19	16
Chromium	ppm	ASTM D5185(m)	>40	8	7	5
Nickel	ppm	ASTM D5185(m)	>10	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	4
Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>5	0	<1	<1
Copper	ppm	ASTM D5185(m)	>15	5	4	4
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

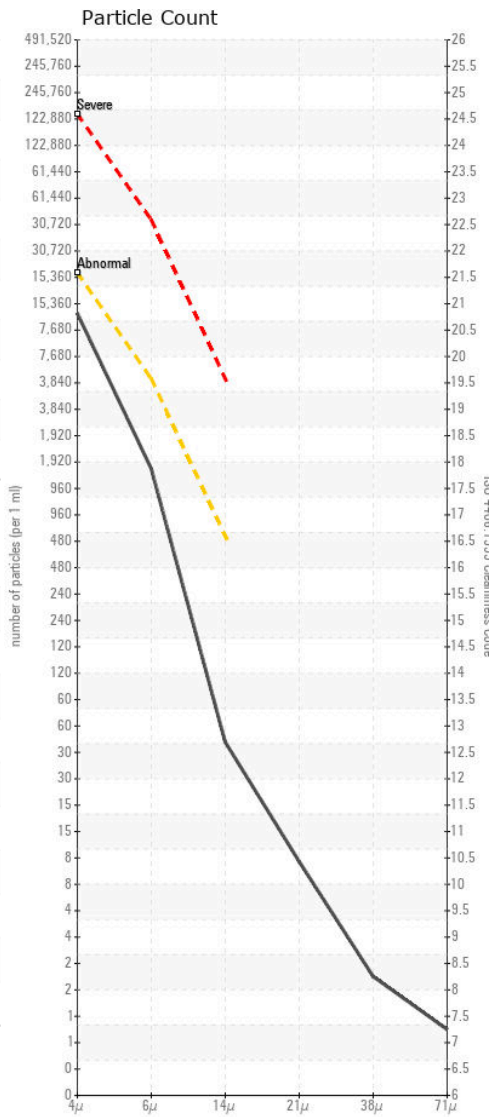
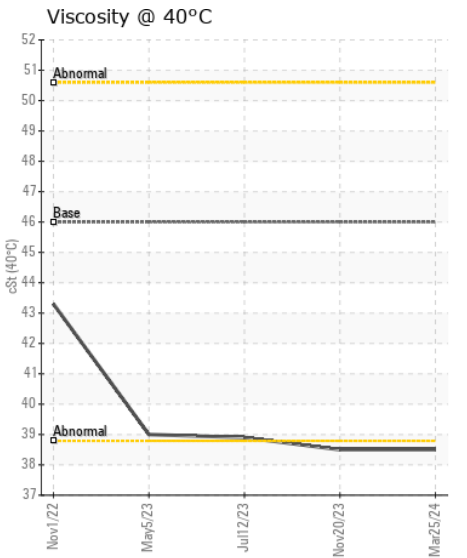
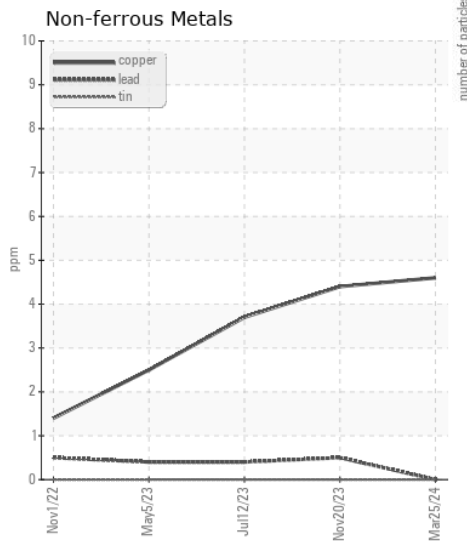
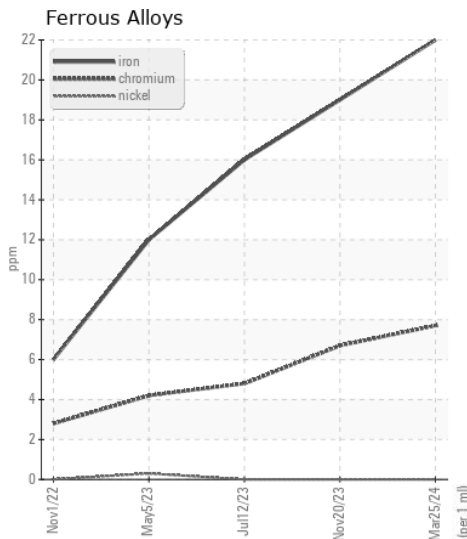
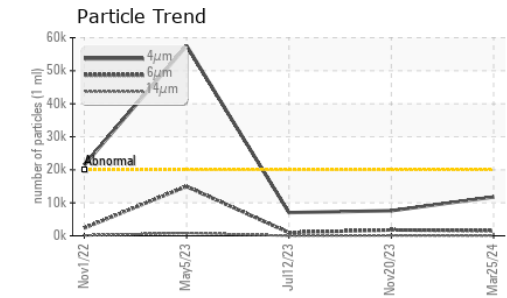
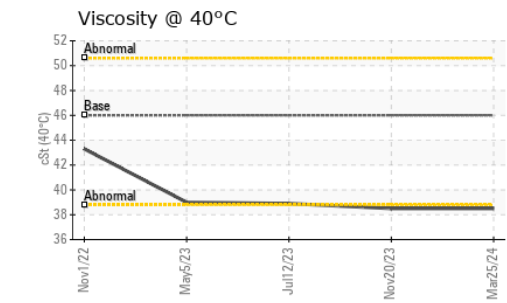
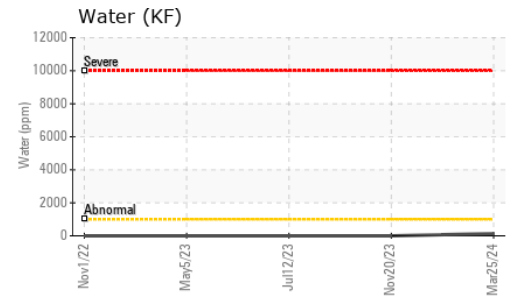
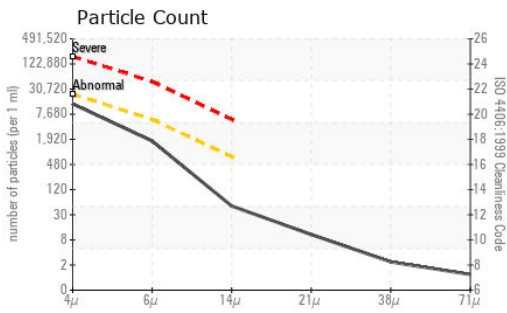
La propreté du système est acceptable pour votre objectif de propreté ISO 4406. La teneur en eau est négligeable. La propreté du système et du fluide est acceptable.

Silicon	ppm	ASTM D5185(m)	>15	3	4	3
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Water	%	ASTM D6304*	>0.1	0.013	---	---
ppm Water	ppm	ASTM D6304*	>1000	138	---	---
Particles >4µm		ASTM D7647	>20000	11770	7597	7024
Particles >6µm		ASTM D7647	>5000	1537	1780	975
Particles >14µm		ASTM D7647	>640	43	77	21
Particles >21µm		ASTM D7647	>160	9	12	6
Particles >38µm		ASTM D7647	>40	2	2	0
Particles >71µm		ASTM D7647	>10	1	1	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/18/13	20/18/13	20/17/12
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	.5%	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		2	2	<1
Boron	ppm	ASTM D5185(m)	0	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	<1	0	0	<1
Magnesium	ppm	ASTM D5185(m)	7	3	3	2
Calcium	ppm	ASTM D5185(m)	1317	940	908	901
Phosphorus	ppm	ASTM D5185(m)	611	533	524	572
Zinc	ppm	ASTM D5185(m)	696	617	606	608
Sulfur	ppm	ASTM D5185(m)	2574	2069	1993	2012
Visc @ 40°C	cSt	ASTM D7279(m)	46	38.5	38.5	38.9



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH
Lab Number : 02627031
Unique Number : 5760163
Test Package : MOB 1 (Additional Tests: KF, PrtCount)

GFL Environmental - 766 -Drummondville -Hauling - Solid Waste
 1005, rue Rhea,
 Drummondville, QC
 CA J2B 8A9
 Contact: Eric Duchesneau
 EDuchesneau@matrec.ca
 T: (819)395-4355
 F:

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.