



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**LIEBHERR R936 050669-1828**  
Component  
**Left Final Drive**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (--- GAL)**

### 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		<b>LH</b>	LH0192333	LH
Sample Date		Client Info		<b>18 Jan 2024</b>	21 Dec 2021	23 Feb 2021
Machine Age	hrs	Client Info		<b>4293</b>	1949	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

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

PQ		ASTM D8184*		<b>9</b>	446	---
Iron	ppm	ASTM D5185(m)	>500	<b>1338</b>	788	261
Chromium	ppm	ASTM D5185(m)	>10	<b>11</b>	12	5
Nickel	ppm	ASTM D5185(m)	>10	<b>5</b>	2	2
Titanium	ppm	ASTM D5185(m)		<b>3</b>	7	2
Silver	ppm	ASTM D5185(m)		<b>1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>108</b>	131	28
Lead	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>50	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
White Metal	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

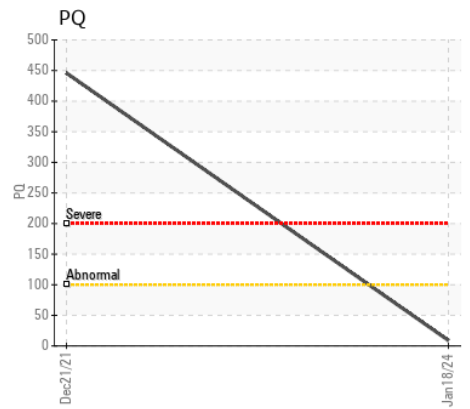
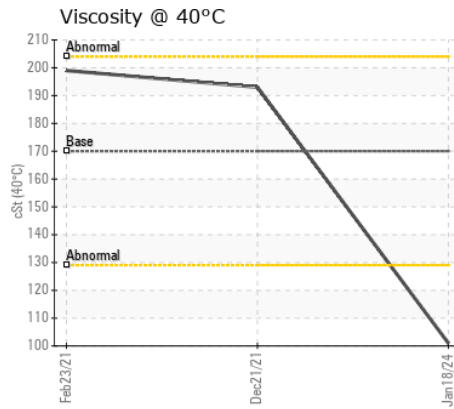
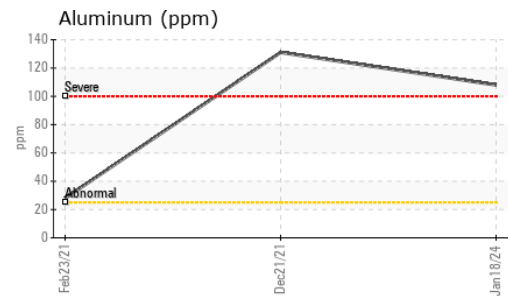
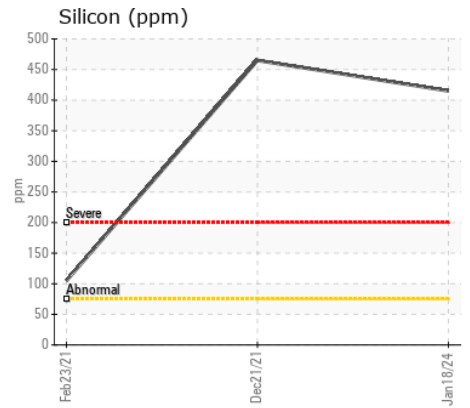
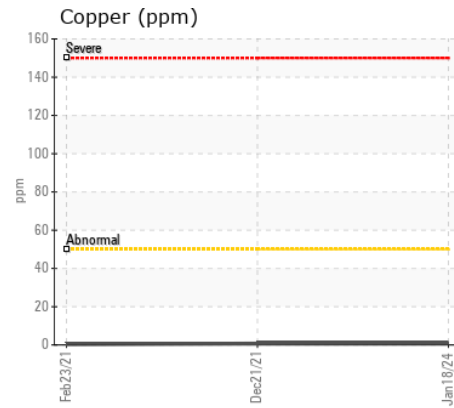
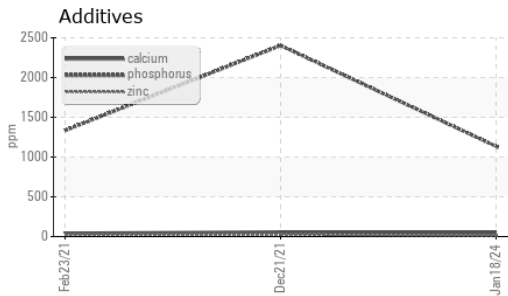
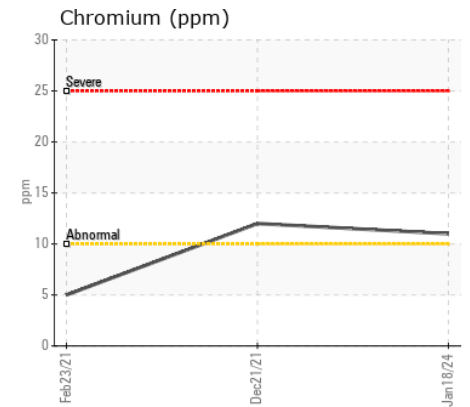
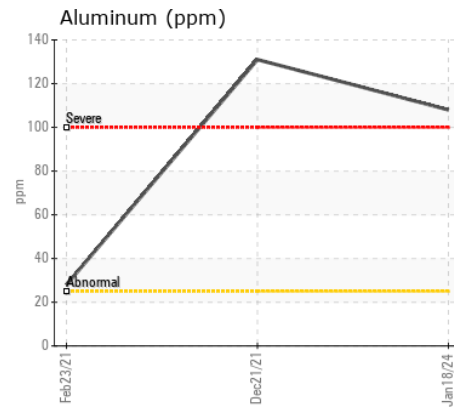
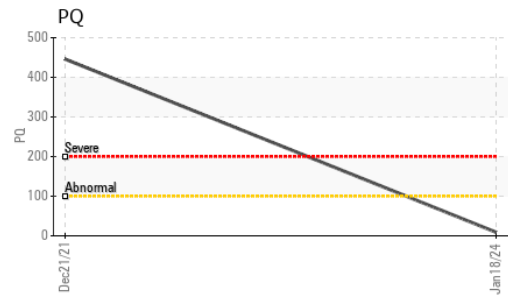
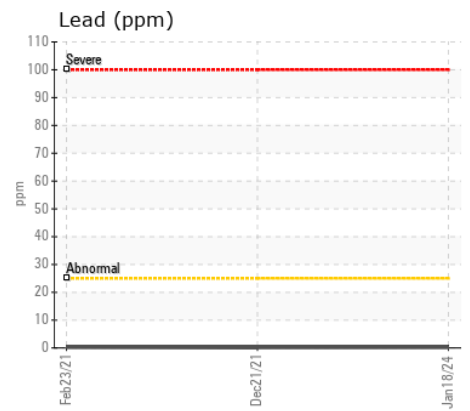
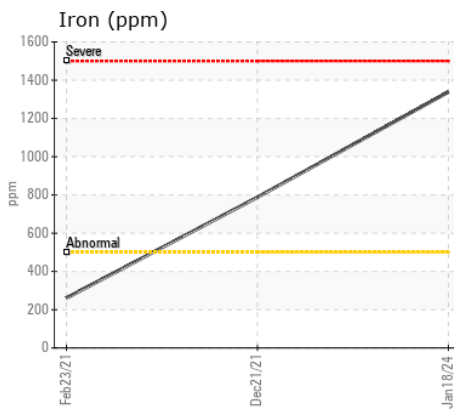
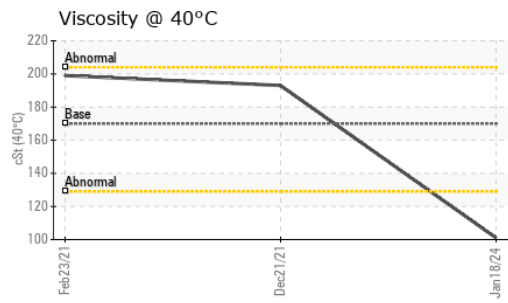
Il n'y a aucun indice de contamination dans l'huile.

Silicon	ppm	ASTM D5185(m)	>75	<b>415</b>	465	105
Potassium	ppm	ASTM D5185(m)	>20	<b>38</b>	46	17
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	LIGHT
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. La viscosité de l'échantillon se situe dans la portée de l'SAE 75W90; nous vous conseillons de vérifier. L'état de l'huile est acceptable pour la durée de service.

Sodium	ppm	ASTM D5185(m)		<b>16</b>	34	12
Boron	ppm	ASTM D5185(m)	0	<b>38</b>	7	6
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	11	15
Molybdenum	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185(m)	0	<b>9</b>	9	3
Magnesium	ppm	ASTM D5185(m)	<1	<b>23</b>	32	12
Calcium	ppm	ASTM D5185(m)	<1	<b>48</b>	57	42
Phosphorus	ppm	ASTM D5185(m)	2143	<b>1135</b>	2404	1334
Zinc	ppm	ASTM D5185(m)	<1	<b>11</b>	25	24
Sulfur	ppm	ASTM D5185(m)	23468	<b>23962</b>	27305	25954
Visc @ 40°C	cSt	ASTM D7279(m)	170	<b>101</b>	193	199



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH **Received** : 19 Jan 2024  
**Lab Number** : 02610015 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 5711101 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: PQ )

**Enterprises S. Besner Inc.**  
 650 Route 201  
 Saint-Clet, QC  
 CA J0P 1S0  
 Contact: Tristan  
 Tristan@entreprisessbesner.com

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.

T:  
F: