



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
ENTREPRISE S BESNER [02604941]
Machine Id
LIEBHERR R936 NOUNITASF0000266
Component
Hydraulic System
Fluid
TOTAL BIOHYDRAN SE 46 (--- GAL)

RECOMMENDATION

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. À NOTER: S.V.P. inclure, avec le prochain échantillon, des détails de la capacité du réservoir et le type et le degré de filtration.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASF0000266	---	---
Sample Date		Client Info		01 Dec 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		2500	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				NORMAL	---	---

WEAR

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

Iron	ppm	ASTM D5185(m)	>50	14	---	---
Chromium	ppm	ASTM D5185(m)	>15	<1	---	---
Nickel	ppm	ASTM D5185(m)	>5	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>8	<1	---	---
Lead	ppm	ASTM D5185(m)	>5	1	---	---
Copper	ppm	ASTM D5185(m)	>15	2	---	---
Tin	ppm	ASTM D5185(m)	>5	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

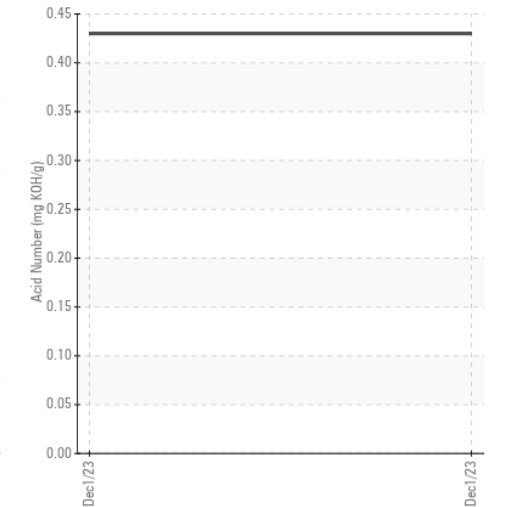
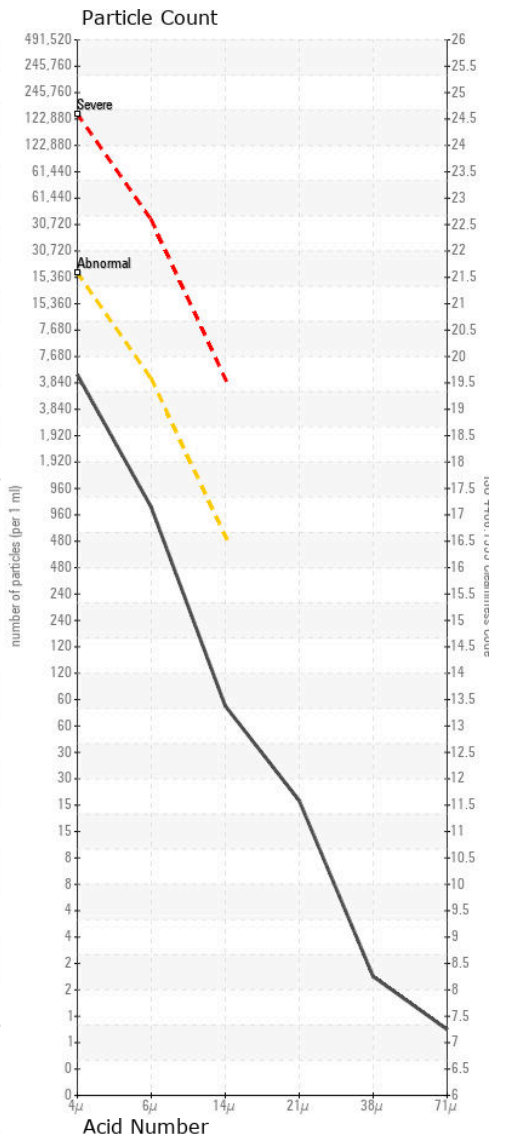
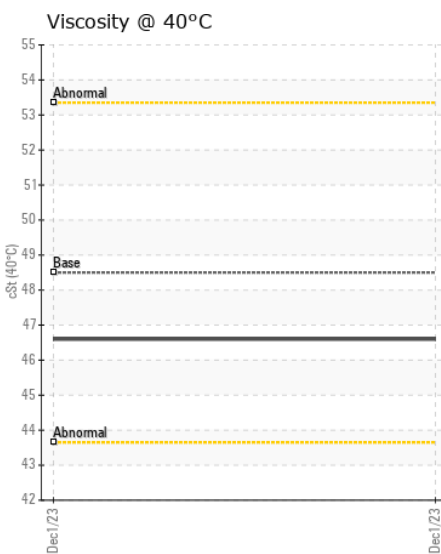
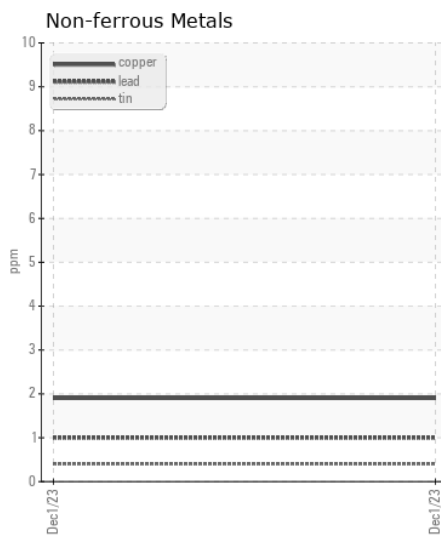
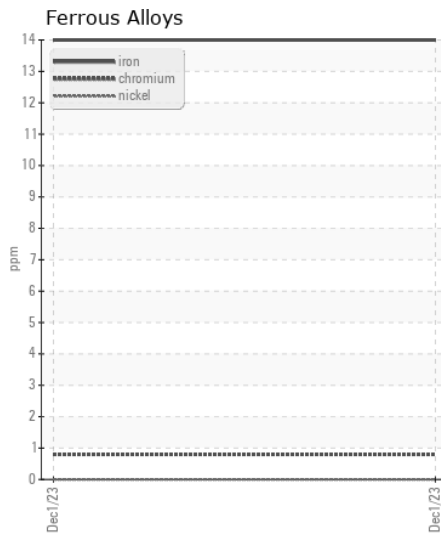
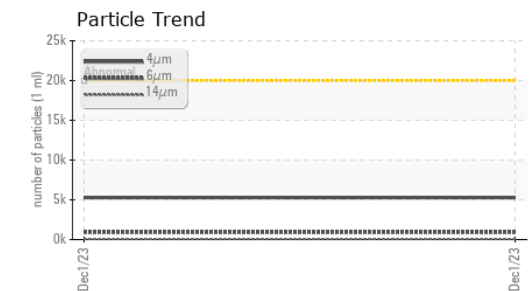
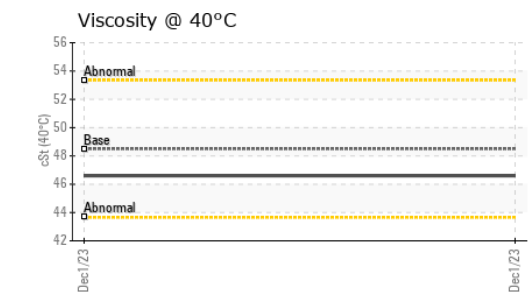
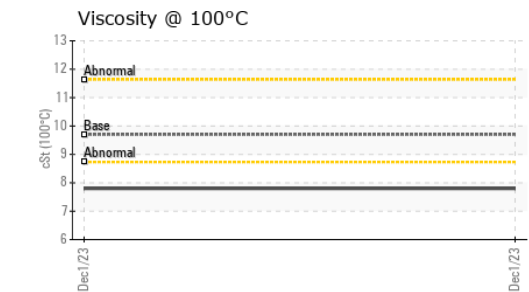
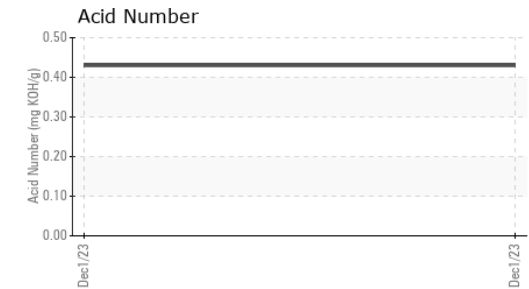
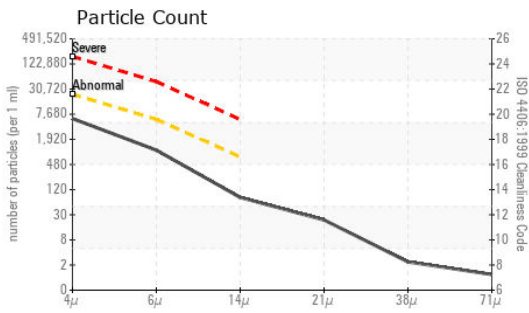
Il n'y a pas d'huile minérale présente dans le fluide. La propreté du système est acceptable pour votre objectif de propreté ISO 4406. La propreté du système et du fluide est acceptable.

Silicon	ppm	ASTM D5185(m)	>25	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Water		WC Method	>0.1	NEG	---	---
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		4.9	---	---
Sulfation	Abs/.1mm	ASTM D7415*		156.6	---	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	0.0	---	---
Particles >4µm		ASTM D7647	>20000	5277	---	---
Particles >6µm		ASTM D7647	>5000	929	---	---
Particles >14µm		ASTM D7647	>640	69	---	---
Particles >21µm		ASTM D7647	>160	20	---	---
Particles >38µm		ASTM D7647	>40	2	---	---
Particles >71µm		ASTM D7647	>10	1	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/17/13	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---

FLUID CONDITION

Le AN est acceptable pour ce fluide. L'état de l'huile permet d'en prolonger l'utilisation.

Sodium	ppm	ASTM D5185(m)		1	---	---
Boron	ppm	ASTM D5185(m)	0	2	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---	---
Manganese	ppm	ASTM D5185(m)	0	0	---	---
Magnesium	ppm	ASTM D5185(m)	0	<1	---	---
Calcium	ppm	ASTM D5185(m)	0	18	---	---
Phosphorus	ppm	ASTM D5185(m)	0	398	---	---
Zinc	ppm	ASTM D5185(m)	0	34	---	---
Sulfur	ppm	ASTM D5185(m)	1100	1042	---	---
Oxidation	Abs/.1mm	ASTM D7414*		177.6	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*		0.43	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	48.5	46.6	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	9.7	7.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	190	136	---	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : ASF0000266 **Received** : 22 Dec 2023
Lab Number : 02604955 **Diagnosed** : 02 Jan 2024
Unique Number : 5698040 **Diagnostician** : Bill Quesnel
Test Package : IND 2 (Additional Tests: FT-IR, KV100, Mineral Oil Content, VI)

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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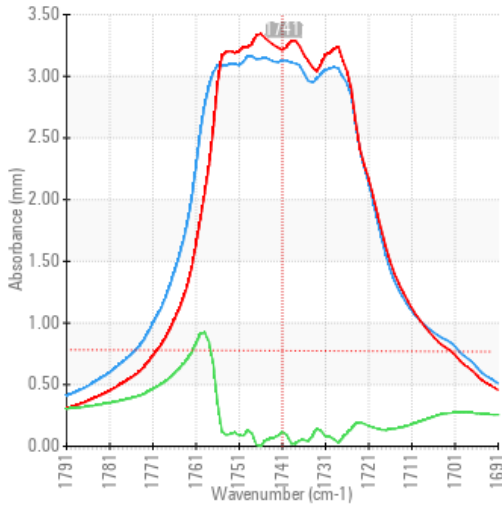
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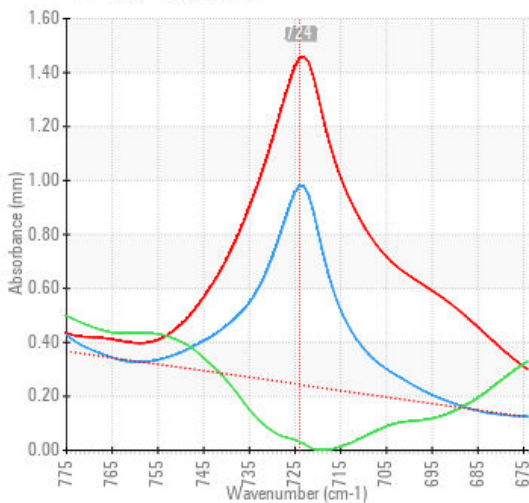
SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Mineral Oil Content	%	ASTM D7418*	<5.0%	0.0	---	---
Zinc	ppm	ASTM D5185(m)	0	34	---	---

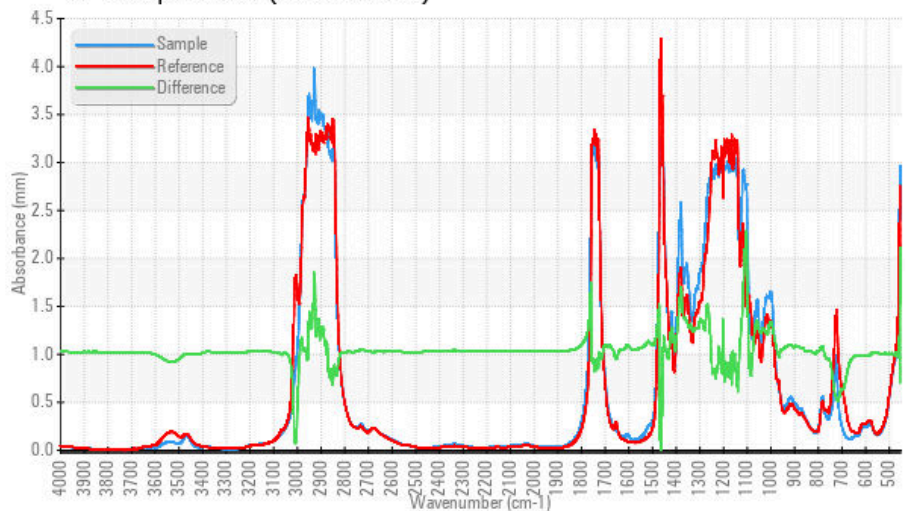
FT-IR - Esters 1



FT-IR - Esters II



FT-IR Spectrum (Absorbance)



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