



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR R936 050669-1828**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA SUPREME 5W30 (--- 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		<b>LH</b>	LH	LH0192330
Sample Date		Client Info		<b>18 Jan 2024</b>	20 Feb 2023	21 Dec 2021
Machine Age	hrs	Client Info		<b>4293</b>	0	1945
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.

Iron	ppm	ASTM D5185(m)	>100	<b>2</b>	8	12
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	<1	4
Copper	ppm	ASTM D5185(m)	>125	<b>2</b>	10	77
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	1	1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

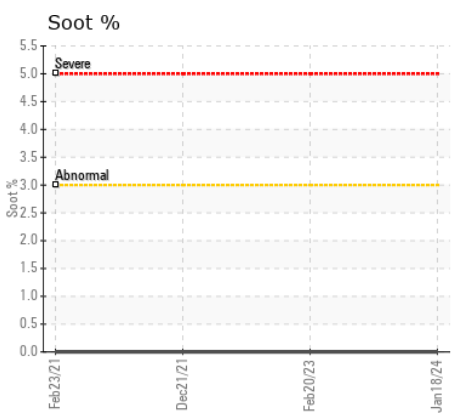
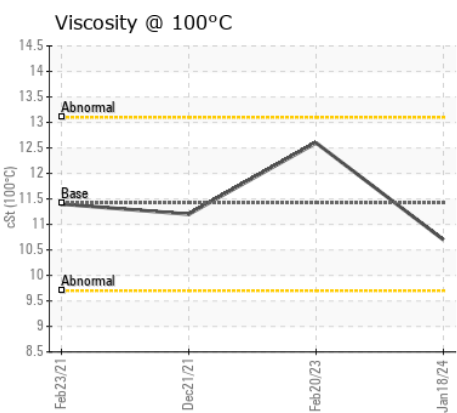
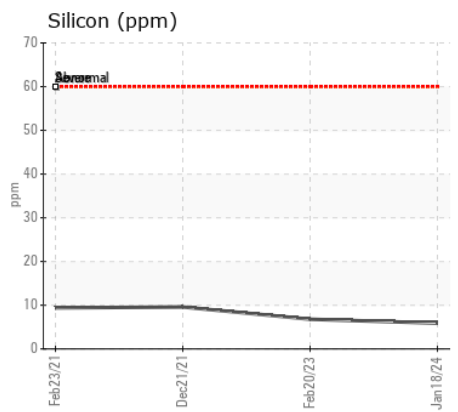
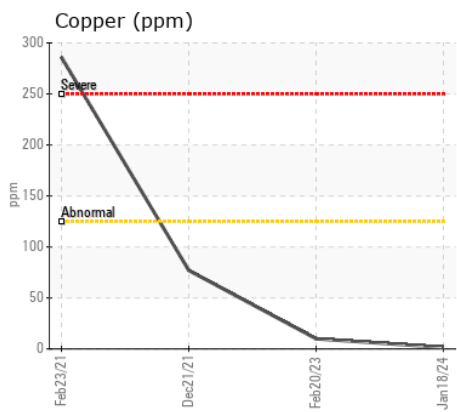
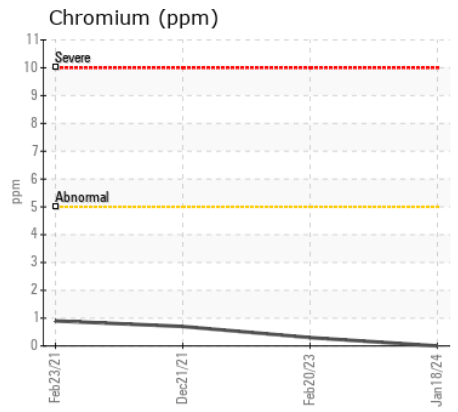
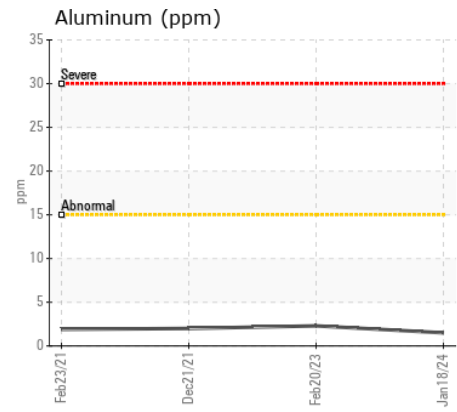
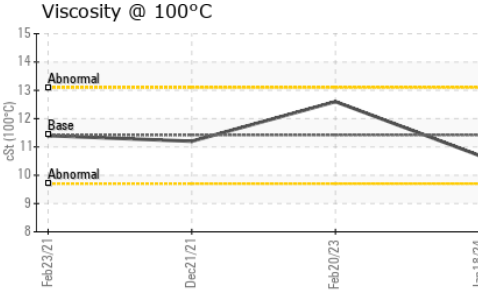
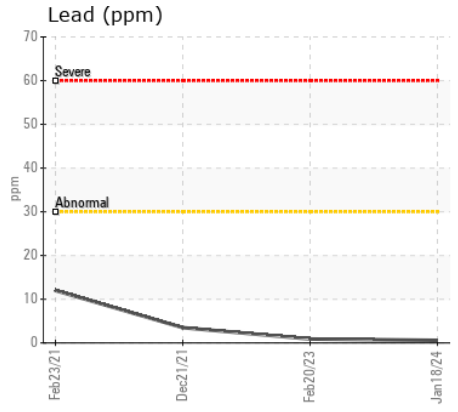
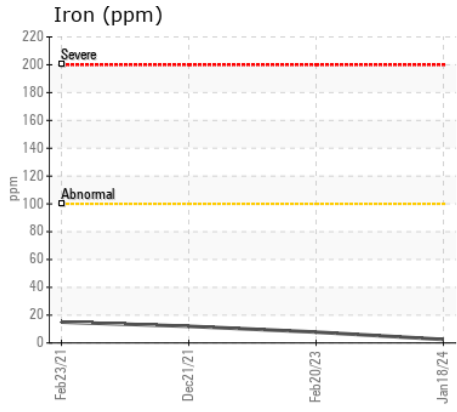
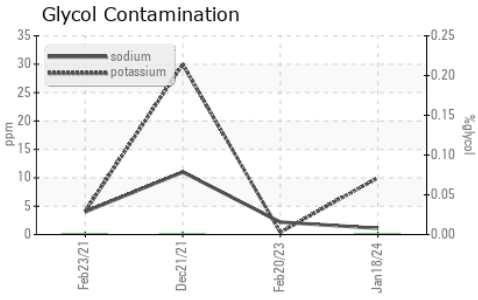
Il n'y a aucun indice de contamination dans l'huile.

Silicon	ppm	ASTM D5185(m)	>60	<b>6</b>	7	10
Potassium	ppm	ASTM D5185(m)	>20	<b>10</b>	<1	30
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	0.7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	0.0
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.5</b>	9.5	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.8</b>	22.7	26.3
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	11
Boron	ppm	ASTM D5185(m)	186	<b>7</b>	3	23
Barium	ppm	ASTM D5185(m)	<1	<b>&lt;1</b>	2	10
Molybdenum	ppm	ASTM D5185(m)	79	<b>61</b>	61	64
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	578	<b>947</b>	996	1291
Calcium	ppm	ASTM D5185(m)	1002	<b>1100</b>	1125	997
Phosphorus	ppm	ASTM D5185(m)	745	<b>1026</b>	1091	1096
Zinc	ppm	ASTM D5185(m)	837	<b>1179</b>	1256	1349
Sulfur	ppm	ASTM D5185(m)	2502	<b>2803</b>	2367	2610
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.4</b>	19.1	28.4
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	<b>10.7</b>	12.6	11.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH **Received** : 19 Jan 2024  
**Lab Number** : 02609939 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 5711025 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**Enterprises S. Besner Inc.**  
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 CA J0P 1S0  
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 Tristan@entrepriessbesner.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.