



### LIEBHERR R938 050294-1650 - Hydraulic System

Sample No: LH0172356

Oil Type: {unknown}



#### INFORMATION SUR L'ÉCHANTILLON

Numéro d'échant.	LH0172356	LH0172347	LH0257074	LH0230894
Date d'échant.	03 Jan 2024	11 Jul 2023	21 Mar 2023	16 Sep 2022
Heures de la Machine	4931	4978	4098	3452
Heures de l'huile	0	0	0	0
Huile changée	Not Changd	Not Changd	Not Changd	Not Changd
Statut de l'échant.	ABNORMAL	ABNORMAL	NORMAL	NORMAL

**MOOREFIELD EXCAVATING LTD.**  
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 T: (519)343-3571  
 F: (519)510-3277



#### ÉTAT D'HUILE

Visc 40°C	cSt	48.3	40.7	40.9	41.2
Indice d'acidité	mg KOH/g	0.97	1.21	---	---



#### CONTAMINATION

Eau	%	NEG	NEG	NEG	NEG
Particules >4µ		3950	8127	10001	4994
Particules >6µ		854	1630	2736	1311
Particules >14µ		34	157	74	67
ISO 4406:1999 (c)		19/17/12	20/18/14	21/19/13	19/18/13
Silicium	ppm	4	4	4	3
Sodium	ppm	3	3	3	2
Potassium	ppm	5	1	<1	<1



#### MÉTAUX D'USURE

PQ		7	5	---	---
Fer	ppm	89	62	29	17
Cuivre	ppm	9	8	7	6
Plomb	ppm	2	1	1	1
Étain	ppm	0	0	0	0
Aluminium	ppm	<1	<1	<1	<1
Chrome	ppm	<1	<1	0	0
Molybdène	ppm	0	0	0	0
Nickel	ppm	<1	<1	0	0
Titane	ppm	0	0	<1	0
Argent	ppm	0	0	0	0
Manganèse	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIFS

Calcium	ppm	1015	995	1082	1017
Magnésium	ppm	5	5	4	5
Zinc	ppm	715	725	732	717
Phosphore	ppm	623	648	668	671
Baryum	ppm	0	0	0	0
Bore	ppm	<1	<1	<1	<1

#### Diagnostic

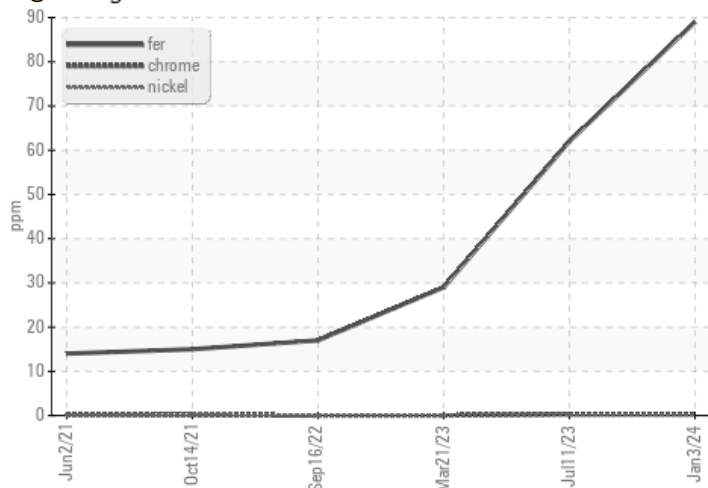
We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: MOOPAL  
 Unique No: 5709315  
 Signed: Kevin Marson  
 Report Date: 16 Jan 2024

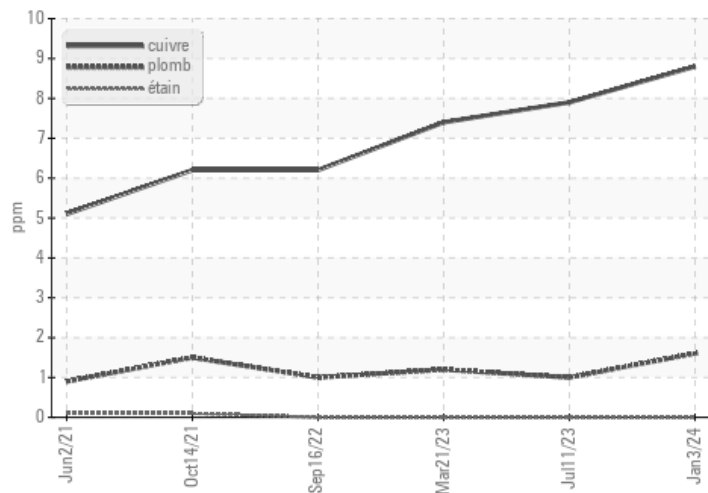


### GRAPHS

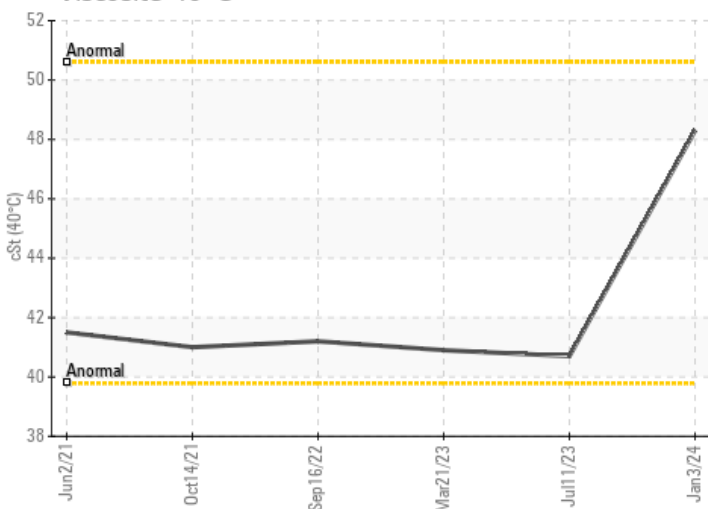
#### ● Alliages ferreux



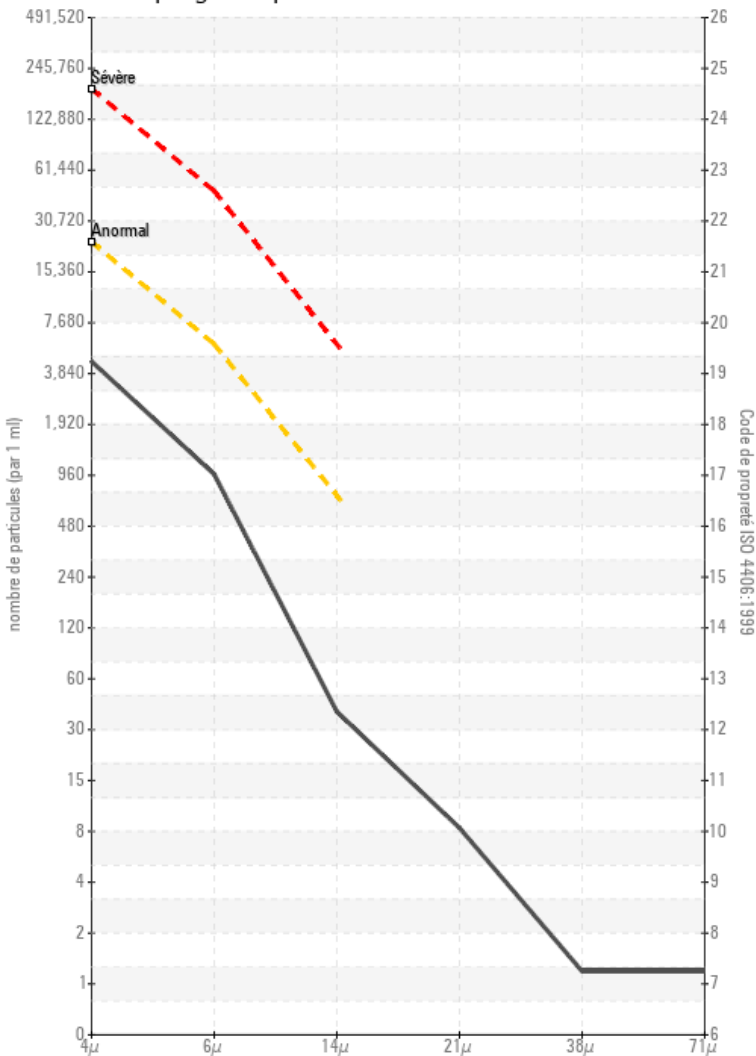
#### Métaux non-ferreux



#### Viscosité 40°C



#### Comptage de particules



#### Indice d'acidité

