



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH50 14799
Component
Hydraulic System
Fluid
IRVING HYDRAULIC OIL LP 46 (320 LTR)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0277070	---	---
Sample Date		Client Info		08 May 2024	---	---
Machine Age	hrs	Client Info		17000	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	6	---	---
Chromium	ppm	ASTM D5185(m)	>5	<1	---	---
Nickel	ppm	ASTM D5185(m)	>2	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>2	<1	---	---
Lead	ppm	ASTM D5185(m)	>4	0	---	---
Copper	ppm	ASTM D5185(m)	>10	<1	---	---
Tin	ppm	ASTM D5185(m)	>2	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

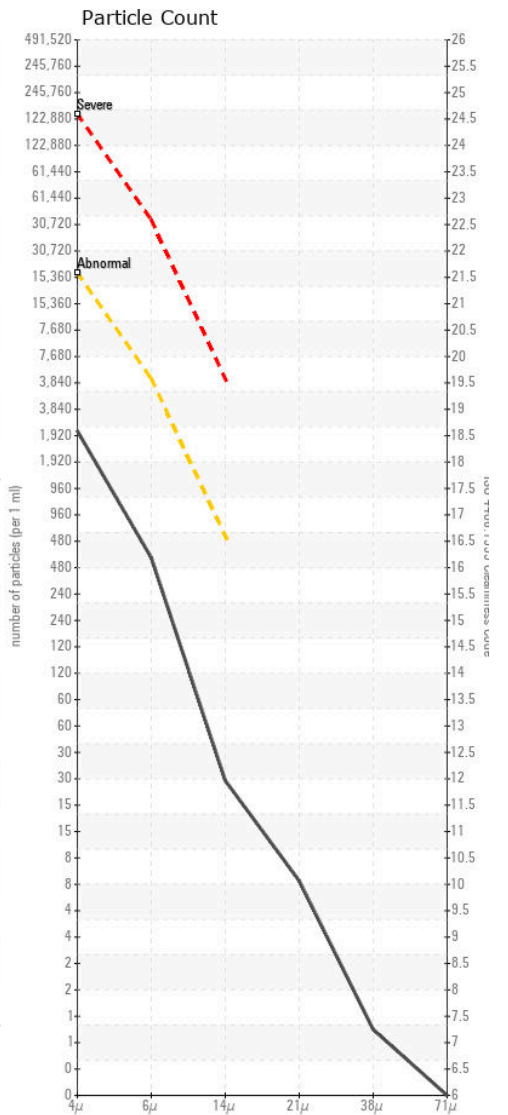
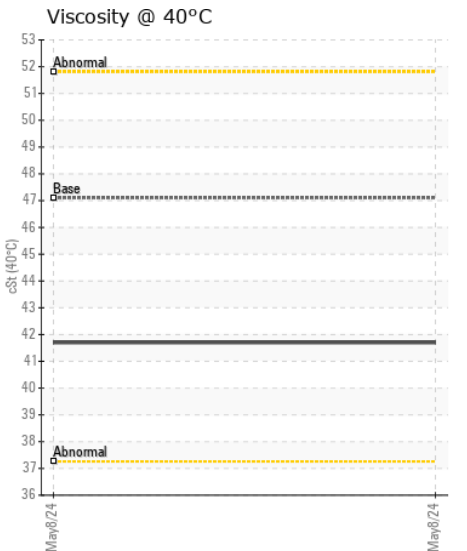
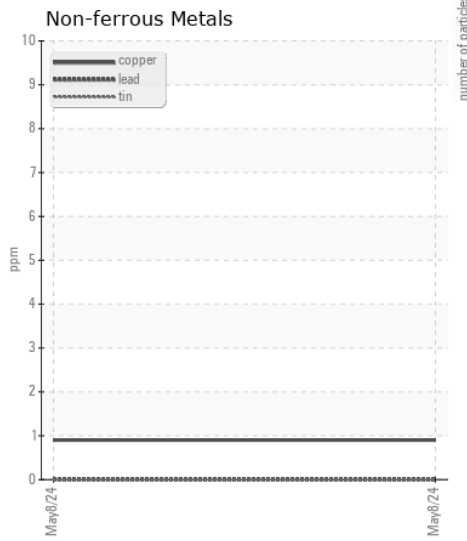
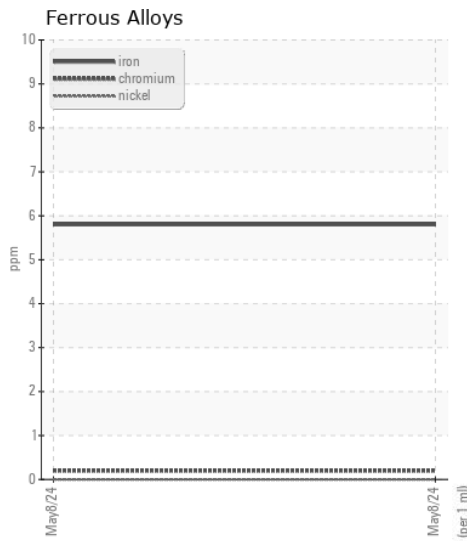
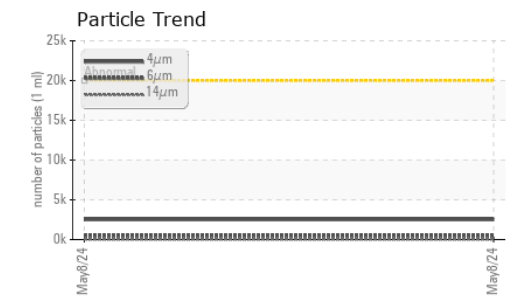
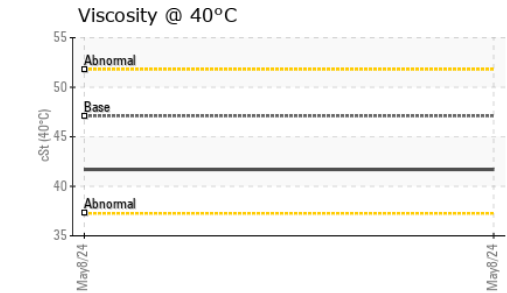
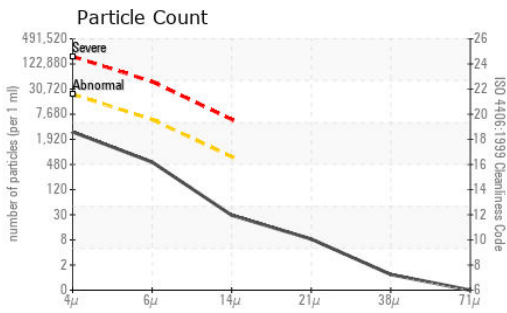
Free water present. The system cleanliness is acceptable for your target ISO 4406 cleanliness code.

Silicon	ppm	ASTM D5185(m)	>17	<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	4	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>20000	2525	---	---
Particles >6µm		ASTM D7647	>5000	480	---	---
Particles >14µm		ASTM D7647	>640	26	---	---
Particles >21µm		ASTM D7647	>160	7	---	---
Particles >38µm		ASTM D7647	>40	1	---	---
Particles >71µm		ASTM D7647	>10	0	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/16/12	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	WGOIL	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	.5%	---	---

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		1	---	---
Boron	ppm	ASTM D5185(m)		6	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		<1	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		13	---	---
Calcium	ppm	ASTM D5185(m)		151	---	---
Phosphorus	ppm	ASTM D5185(m)		337	---	---
Zinc	ppm	ASTM D5185(m)	400	439	---	---
Sulfur	ppm	ASTM D5185(m)		982	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	47.1	41.7	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0277070 **Received** : 23 May 2024
Lab Number : 02637205 **Tested** : 27 May 2024
Unique Number : 5786367 **Diagnosed** : 27 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PrtCount)

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.

INTERFOR CORP
 5060 RTE 430
 BRUNSWICK MINE, NB
 CA E2A 6W6
 Contact: Daniel Hachey
 daniel.hachey@interfor.com
 T: (506)547-8700
 F: (506)548-1892