



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

FRPD
Machine Id

LIEBHERR N/A 187299

Component

Pump Drive

Fluid

CHEVRON DELO GEAR ESI OIL 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0242031	---	---
Sample Date		Client Info		18 Apr 2024	---	---
Machine Age	hrs	Client Info		35751	---	---
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				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>500	23	---	---
Chromium	ppm	ASTM D5185(m)	>15	0	---	---
Nickel	ppm	ASTM D5185(m)	>10	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	1	---	---
Lead	ppm	ASTM D5185(m)		0	---	---
Copper	ppm	ASTM D5185(m)	>35	<1	---	---
Tin	ppm	ASTM D5185(m)	>4	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

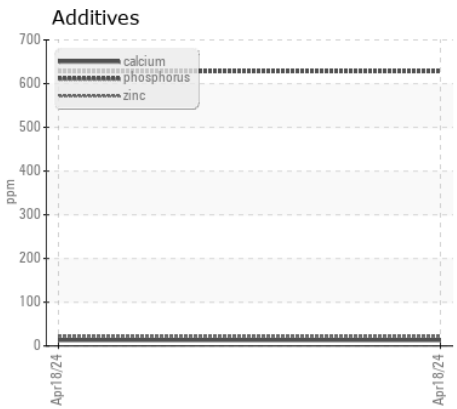
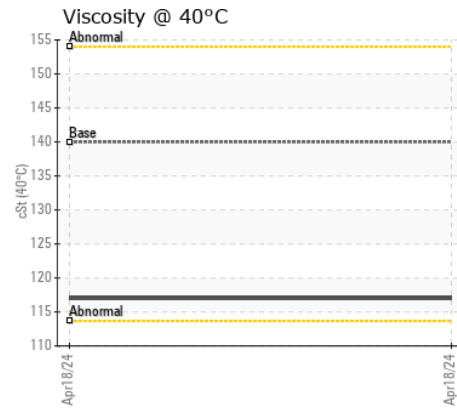
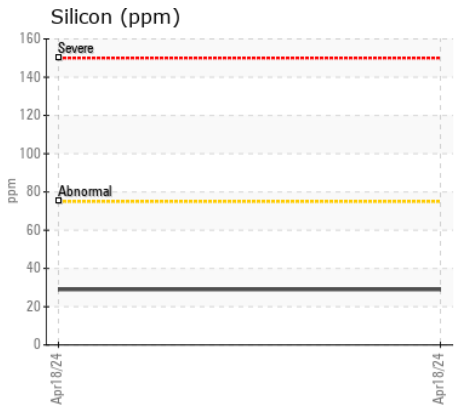
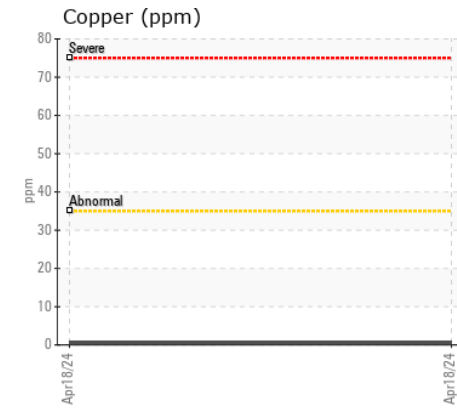
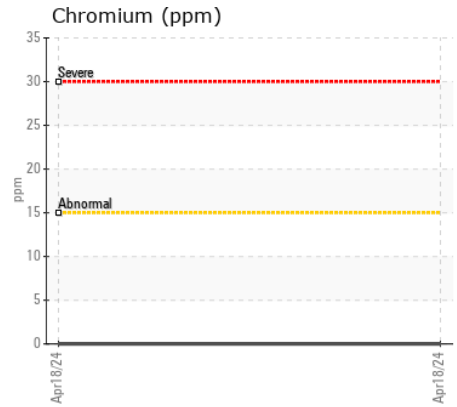
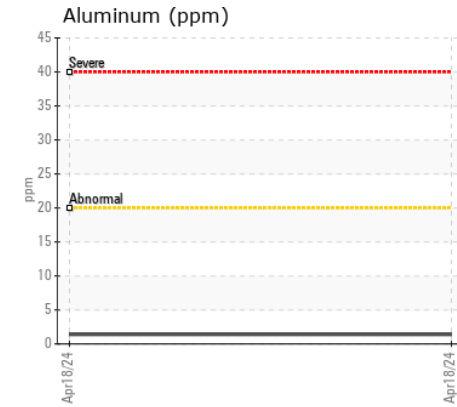
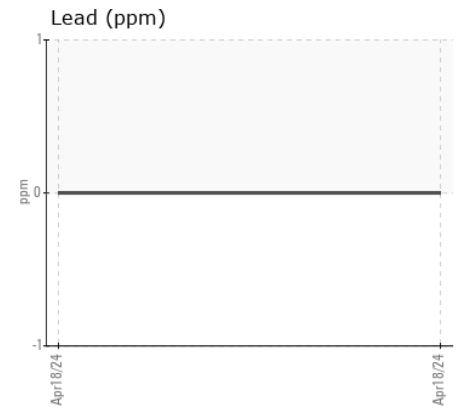
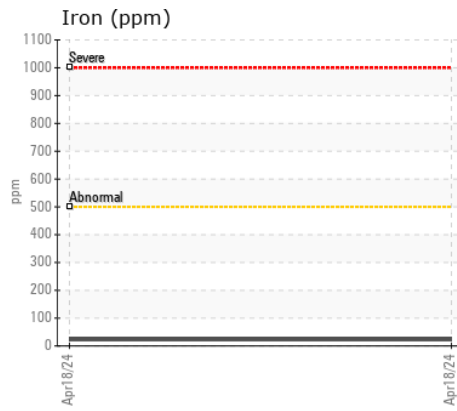
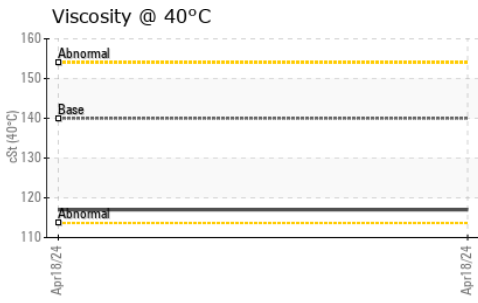
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	29	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)	15	4	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	0	5	---	---
Calcium	ppm	ASTM D5185(m)	5	13	---	---
Phosphorus	ppm	ASTM D5185(m)	600	628	---	---
Zinc	ppm	ASTM D5185(m)	0	22	---	---
Sulfur	ppm	ASTM D5185(m)	22000	16283	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	140	117	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0242031 **Received** : 02 May 2024
Lab Number : 02632848 **Tested** : 02 May 2024
Unique Number : 5774001 **Diagnosed** : 02 May 2024 - Wes Davis
Test Package : MOB 1

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 1830 River Drive
 New Westminister, BC
 CA V3M 2A8
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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.