



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH30M 153712-1253

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (--- GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH	LH	---
Sample Date		Client Info		30 Apr 2024	14 Dec 2023	---
Machine Age	hrs	Client Info		1001	500	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	18	15	---
Chromium	ppm	ASTM D5185(m)	>5	2	<1	---
Nickel	ppm	ASTM D5185(m)	>2	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	<1	---
Aluminum	ppm	ASTM D5185(m)	>2	<1	<1	---
Lead	ppm	ASTM D5185(m)	>4	0	<1	---
Copper	ppm	ASTM D5185(m)	>10	3	2	---
Tin	ppm	ASTM D5185(m)	>2	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

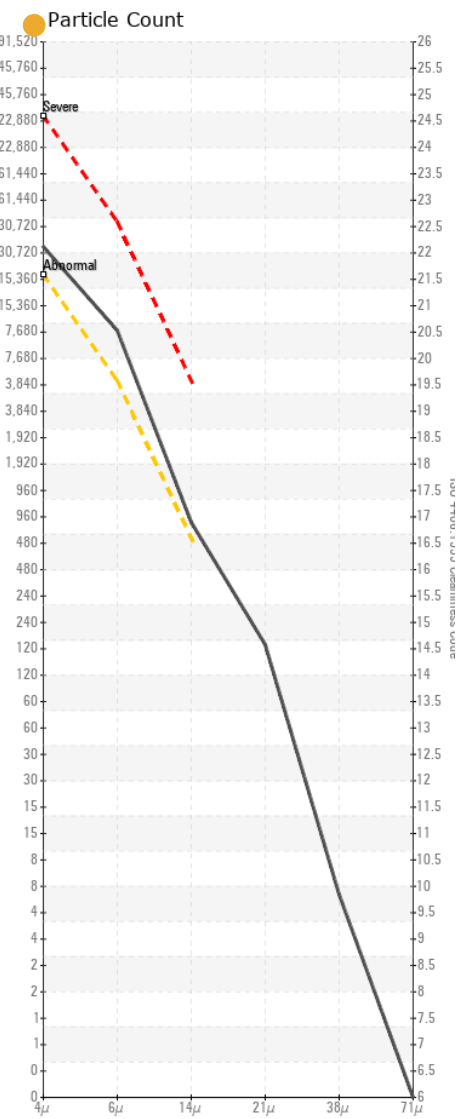
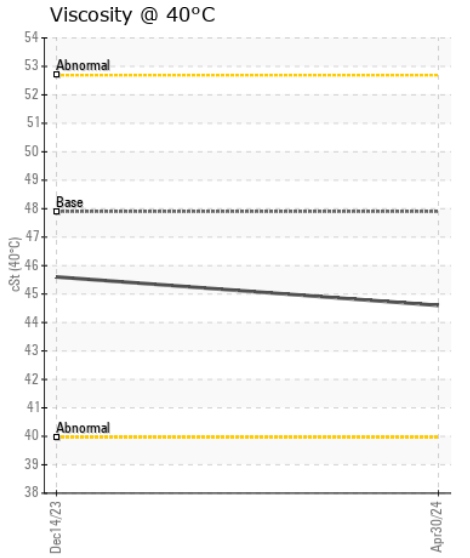
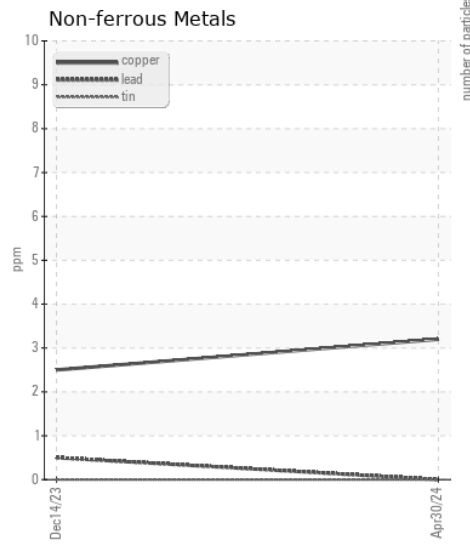
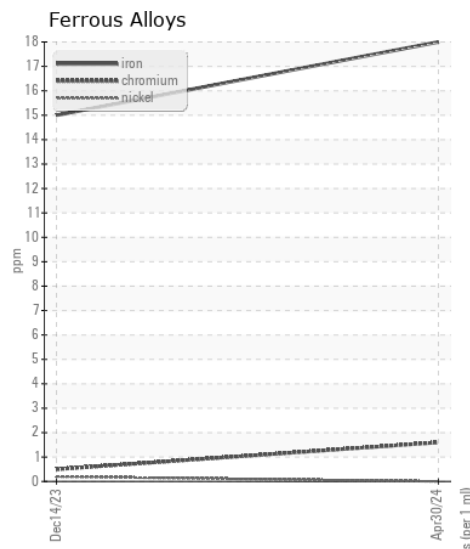
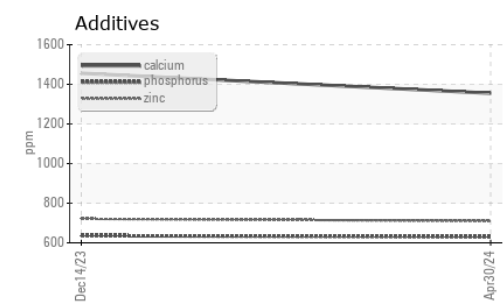
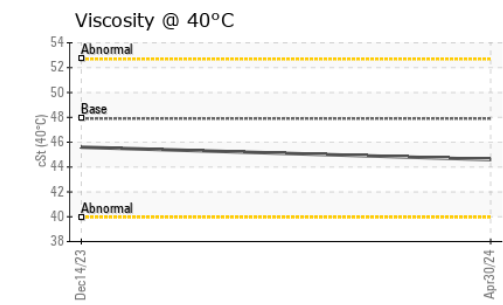
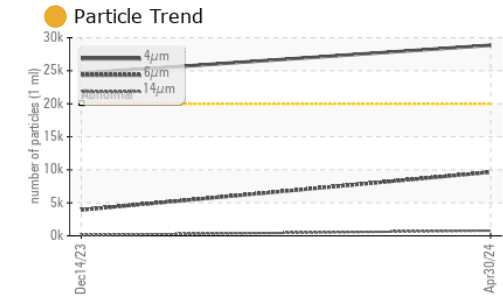
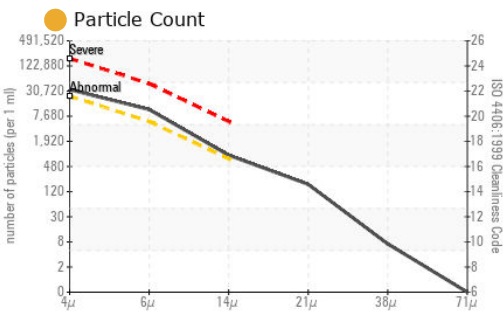
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>17	<1	2	---
Potassium	ppm	ASTM D5185(m)	>20	1	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>20000	28858	24634	---
Particles >6µm		ASTM D7647	>5000	9644	3923	---
Particles >14µm		ASTM D7647	>640	784	108	---
Particles >21µm		ASTM D7647	>160	158	19	---
Particles >38µm		ASTM D7647	>40	6	1	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	22/20/17	22/19/14	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	VLITE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	2	---
Boron	ppm	ASTM D5185(m)	0	<1	<1	---
Barium	ppm	ASTM D5185(m)	0	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	0	0	---
Manganese	ppm	ASTM D5185(m)	1	<1	0	---
Magnesium	ppm	ASTM D5185(m)	0	9	8	---
Calcium	ppm	ASTM D5185(m)	100	1355	1456	---
Phosphorus	ppm	ASTM D5185(m)	670	630	636	---
Zinc	ppm	ASTM D5185(m)	850	710	721	---
Sulfur	ppm	ASTM D5185(m)	1600	3329	3462	---
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	44.6	45.6	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH
Lab Number : 02633149
Unique Number : 5774302
Test Package : MOB 1 (Additional Tests: PrtCount)
Received : 03 May 2024
Tested : 06 May 2024
Diagnosed : 06 May 2024 - Kevin Marson

Innovation Industrielle Boivin Inc.
 2205 de la Fonderie
 Chicoutimi, QC
 CA G7H 8B9
 Contact: Service Manager

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.

T:
F: