



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
LIEBHERR 70764
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX EXTREME (--- GAL)

RECOMMENDATION

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		LH0280969	LH0194396	---
Sample Date		Client Info		17 Jun 2024	26 Aug 2022	---
Machine Age	hrs	Client Info		9395	14323	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ATTENTION	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	4	5	---
Chromium	ppm	ASTM D5185(m)	>10	2	2	---
Nickel	ppm	ASTM D5185(m)	>10	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>10	<1	1	---
Lead	ppm	ASTM D5185(m)	>10	2	<1	---
Copper	ppm	ASTM D5185(m)	>75	11	9	---
Tin	ppm	ASTM D5185(m)	>10	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

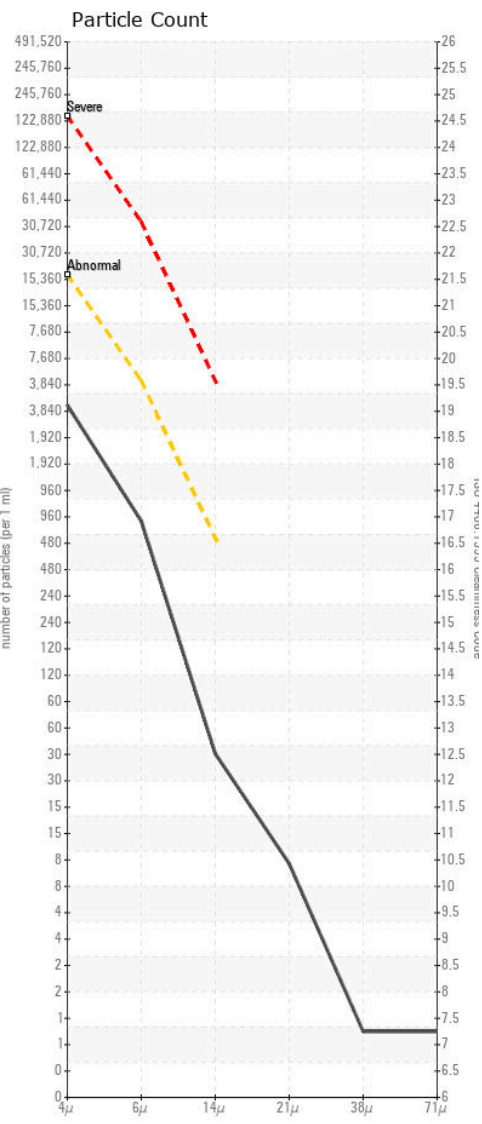
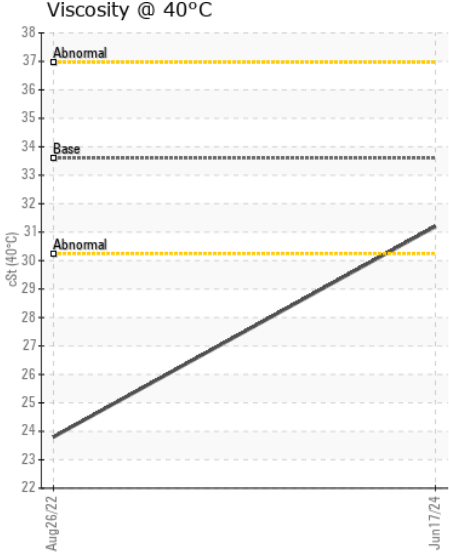
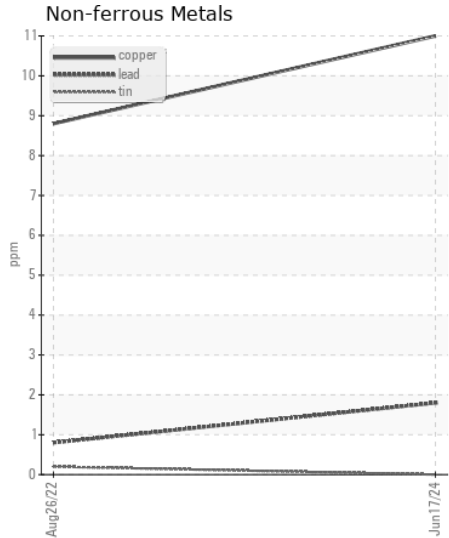
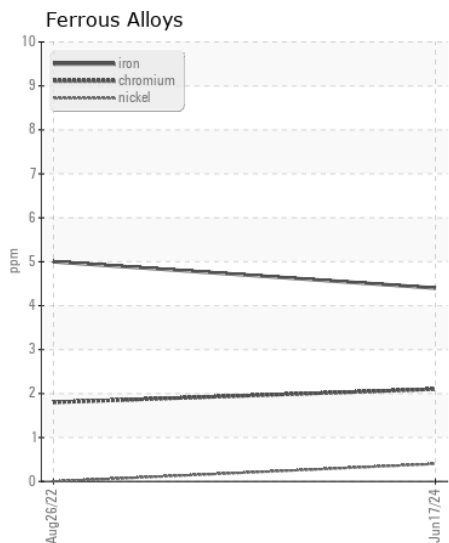
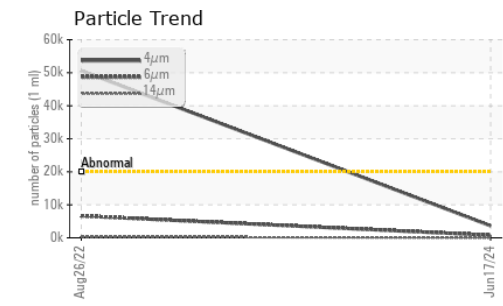
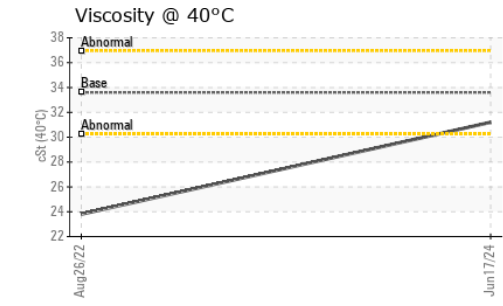
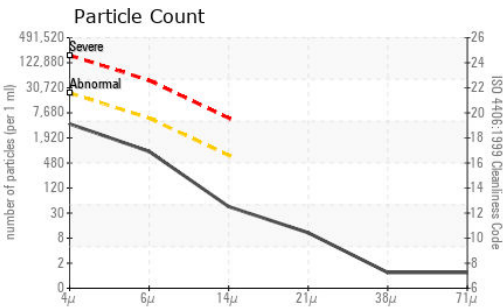
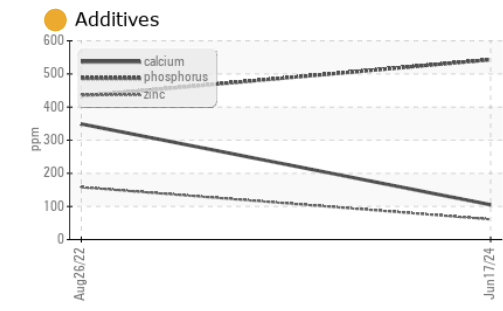
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>20	3	7	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>20000	3637	▲ 50623	---
Particles >6µm		ASTM D7647	>5000	797	▲ 6620	---
Particles >14µm		ASTM D7647	>640	38	● 273	---
Particles >21µm		ASTM D7647	>160	9	● 60	---
Particles >38µm		ASTM D7647	>40	1	2	---
Particles >71µm		ASTM D7647	>10	1	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/17/12	▲ 23/20/15	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
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	1	---
Boron	ppm	ASTM D5185(m)	0	10	● 16	---
Barium	ppm	ASTM D5185(m)	0	<1	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	<1	---
Manganese	ppm	ASTM D5185(m)	0	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	0	<1	2	---
Calcium	ppm	ASTM D5185(m)	0	● 105	● 349	---
Phosphorus	ppm	ASTM D5185(m)	527	543	433	---
Zinc	ppm	ASTM D5185(m)	0	● 61	● 158	---
Sulfur	ppm	ASTM D5185(m)	1130	1004	● 1545	---
Visc @ 40°C	cSt	ASTM D7279(m)	33.6	31.2	▲ 23.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0280969 **Received** : 18 Jun 2024
Lab Number : 02642612 **Tested** : 19 Jun 2024
Unique Number : 5800151 **Diagnosed** : 19 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PrtCount)

XCALIBER
 30 ALBERTA AVE
 SPRUCEGROVE, AB
 CA T7X 4P9
 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: